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Quiet environments and the intentional practice of silence: Towards a new perspective in the analysis of silence in organizations

Abstract: While non-speech communication and “metaphorical” silence (in opposition to voice) have benefited from a considerable academic attention, less is known about *quiet environments* and the *intentional practice of silence*. We theorize these silences as potential catalysts of internal and collective reflection. Such silences can strongly impact individual and organizational processes and outcomes, notably in the workplace. The meaning, valence and effects of these silences are highly context- and perspective-dependent. By characterizing and studying these silences and their effects, we show how they are functional or dysfunctional to individuals or organizations. These silences can notably serve as emotion regulators and generate an environment favorable to individual and collective decision-making. Examining what is lost by individuals and organizations due to a lack of these silence and what can be gained with a better harnessing of their power is promising.

Keywords: noise; organizations; quietness; silence; voice.

1. Introduction

Systematically praised by religions, spiritualities and philosophies, silence is relatively absent from our modern lives. Most human beings live in a noisy and restless environment. This almost constant noise can impair the human ability to address the most pressing challenges of our time, reduce stress levels, improve well-being and individual or organizational performance. According to the French philosopher Blaise Pascal, “*all the unhappiness of men arises from one simple fact: that they cannot sit quietly in their chamber*” (Pensées, 1670). We argue that silence, simply defined as the absence of sound or noise, may help solving the most vexing problems of our existence. We do not mean the absolute lack of sound, that

rarely exists. Some sounds are inaudible and others, notably background nature sounds (e.g., flowing water, forest songbirds), are not considered as disturbing silence (Fisher, 1998) and may offer quiet environments for human beings.

We focus on the environmental quietness (e.g., quiet spaces) and intentional practice of silence (e.g., silence retreats or meetings) by individuals, groups, or organizations. The former can facilitate the latter that requires discipline from someone to refrain from speaking and/or making noise. Interestingly, noise, the intuitive opposite of quiet times has benefited from more attention, notably to stress its detrimental consequences (e.g., Sundstrom et al., 1994). A 2014 study by Steelcase, an office equipment manufacturer, found that noise causes 86 minutes worktime loss per day and per employee (Steelcase 2014; see also Calisi and Stout, 2015). Interestingly, these noise-related costs are frequently “hidden” or less visible for the company’s accounts, in contrast with the strong visibility of costs savings offered by other arrangements, such as open spaces. Recently, scholars found that open offices fall short of expectations, notably because of lack of privacy and constant noise (Bernstein et Turban, 2018; Bernstein and Waber, 2019; Sander et al., 2021)¹. Moreover, several businesses use silence and noise cancellation promises as a powerful marketing instrument. Some hotels emphasize their “Quiet Room” certificate, restaurants propose silent dinners, airline companies are proud to offer the quietest aircraft or noise cancelling headphones. There is little doubt that providing a quiet working environment can be a key factor in the attractiveness, performance and well-being of certain jobs. In addition, several secular organizations value quietness and the intentional practice of silence (Reis Louis, 1994; Molina-Markham, 2014; Waistell, 2018). Quiet times are becoming so scarce than they are

¹ Several factors can explain why this evidence is not more used, such as short-term budget considerations, conforming to the ideology of transparency or nurturing the illusion that when managers can see and control employees, they are more likely maximize efficiency (Brooks, 2022).

sometimes considered a luxury in the highly dynamic and noisy environment that surrounds most humans (Biguenet, 2015).

We argue that literal silences deserve more attention and we make a first step in this direction. These literal silences correspond to the silence of the environment or silence of the considered individual or both. Nevertheless, these literal silences remain frequently -and wrongly- associated with emptiness and inaction and seem inconsistent with typical values of modern organizations, that expect and reward dynamic and action-oriented collaborators and processes, supposed to lead to better performances. Given that an identical word is used for various situations, we take time to distinguish these literal silences from other kinds of silence that have already attracted attention from communication, management and organizational behaviour scholars.

Rather than adopting a *for* or *against* position, we argue that much can be gained thanks to a better understanding of these silences and how they are functional or dysfunctional to individuals and organizations. Paying more attention to these silences can significantly add to theory, empirical development and practice. First, we theorize literal silences as catalysts of internal reflection that provide a foundation for a better understanding of silence consequences. This theorization appears as a crucial preliminary step, because this phenomenon is understudied and necessitates to be rigorously defined beforehand. Second, if all silences are not created equal, these silences (quiet environments, intentional practice of silence) may have substantial impact on individual and organizational processes and outcomes. This knowledge matters because it enriches the toolbox of individuals and managers, who work with words (Farrow et al., 2018, Grolleau et al., 2022), but also with silences. We argue that examining these kinds of silence could contribute to make the world and the workplace better places. These silences can notably ensure an emotional regulation function and lead to environments that facilitate individual and collective decision-making.

More than theoretical constructs, these silences can lead to concrete applications such as occupations meeting individuals' aspirations, silence-friendly workplaces, instituting quiet times and spaces and silent meetings. This could contribute to provide avenues for research into the problems of burnout, stress or other professional diseases, which constitutes a major health issue in most of developed countries.

The remainder of our contribution is organized as follows. In the following section, we distinguish the literal silences that constitute our research object from other kinds of silence. We notably overview the predominant concepts of silence, either as a non-speech communication mean or as a failure to voice, in the management and organizational literature and show that "literal silences" covered in our contribution are different. Afterwards, we learn from the examples of some (secular) organizations for which silence is an essential operating principle and an organizational change agent. Then, we characterize more precisely quiet environments and the intentional practice of silence, notably by considering whether they are chosen or imposed and individually or collectively practiced. Section 5 theorizes these silences as catalysts facilitating a greater focus and concentration. We then examine quiet environments and the voluntary practice of silence to explain how these silences can be "golden" (respectively, "leaden") and thus conducive (respectively, detrimental) to individual and organizational performances. The last section concludes.

2. Taking stock of the dominant conceptualizations of silence in communication and organizational behaviour research

A literature review points out that silence is an elusive concept that has attracted considerable attention, notably in two management-related fields of research: communication and organizational behaviour. We briefly overview these conceptualizations of silence in these

two fields and show that although there is some overlap, our conceptualization of silence is different and can generate innovative insights.

First, in communication research, silence frequently intervenes when two or more agents interact or communicate, and involves an absence of speech. Interestingly, several researchers have emphasized that silence – an absence of words or utterances – conveys meaning and constitutes an important type of (nonverbal) communication. Nevertheless, we observe that the meaning of a given silence is highly context- and perspective-dependent. A similar outward manifestation, i.e., a silence, can move communication forward, regulate it or shut it down. This context and perspective dependency have generated numerous useful distinctions in communication research (e.g., Johannesen, 1974; Tannen & Saville-Troike, 1985; Kurzon, 2011) and in psychology (e.g., Valle, 2019). For instance, several authors have proposed distinctions pertaining to silence such as its five functions (linking, affecting, revelational, judgmental and activating) (Jensen, 1973), its twenty meanings (Johannesen, 1974), its positive or negative valuations (Tannen, 1985), its intentionality or unintentionality, its typology with four types (conversational, thematic, textual and situational) (Kurzon, 2007), its ten distinguishable forms from the most external worldly manifestations to the subtlest and most inwardly attuned discernments (Valle, 2019) and so forth.

While our elaborations overlap some of these contributions, we would like to stress three important points. First, we differ from most precedent contributions because we do not (only) focus on communication interactions. The silences we examine do not necessarily perform a communication function. For instance, the studied silences can make sense for an individual alone (e.g., finding a quiet zone and deciding not to talk) or engaged in interactions with several other individuals (e.g., silent meeting or silent couple dinner). Second, when the individual remains silent in the sense of non-verbal communication, it does not necessarily target quietness or even a temporary break, which is an important dimension of the silence we

examine here. Third, we explicitly adopt an organizational perspective and examine an architectural silence to better understand how these basic situations (quiet zones or voluntary practice of silence) can be functional or dysfunctional for individuals and organizations.

Lesson 1a: In communication research, silence as the absence of utterances is considered an important mean of communication. While this silence has been subject to useful distinctions, a recurring point is that its interpretation is highly context and perspective-dependent. While these distinctions can inform our understanding of the silences we examine, these latter encompass more than the absence of talk, do not necessarily aim at communicating and do not necessitate a communication interaction to occur.

The other stream of literature conceptualizes silence as a failure to voice² (Hirschman, 1970; Donaghey et al., 2011; Morrison, 2014; Knoll et al., 2016; Wilkinson et al., 2021; Morrison, 2023). This failure to speak up/out corresponds to the withholding of meaningful information. This silence can be motivated by various considerations, especially in managerial situations. For instance, employees' silence has been categorized either as defensive (self-protection because the individual fears the consequences of speaking up), acquiescent (the individual's voice is not valued and unlikely to make a difference), or prosocial (other-oriented, protecting the organization) (Pinder & Harlos, 2001; Van Dyne et al., 2003; Brinsfield, 2013). In organizations, it is mainly seen as dysfunctional and has been linked to several detrimental outcomes (Milliken et al., 2003; Morrison, 2014; Knoll et al., 2016; Bashshur & Oc, 2015; Hao et al., 2022) such as impaired decision-making, creativity

² Although prior research considered voice and silence as being mutually exclusive, this view is sometimes too simplistic and some recent contributions (e.g., Knoll & Redman, 2016) called for a qualified approach.

inhibition, negative emotions, decrease in employees' wellbeing, satisfaction, and health or unethical decisions (Sherf et al., 2021) although it can be other-regarding in some circumstances, e.g., by leaving time and space to others in order to help them in learning and mastering some competences (Pinder & Harlos, 2001). Simply said, such a silence deprives the organization from valuable inputs and constitutes an important barrier to organizational change and development. The literature has also characterized circumstances that are conducive to this detrimental silence and offered some guidance to reduce its occurrence and consequences. Perceiving or experiencing injustice in the organization, receiving continually negative feedback from supervisors or colleagues, leader aggressive humor and fearing of negative consequences (job loss, deterioration in relational quality, failing to address issues raised by employees) may cause employees to remain silent (Milliken et al., 2003; Brinsfield, 2013; Weiss & Morrison, 2019). Sometimes, this silence aims at deceiving others by preventing individuals from speaking up in the face of injustice and abuse and involuntarily encourage wrongdoers to engage in further unethical behaviours (Bird, 1996). For instance, encouraging employees to voice their moral concerns and providing channels to facilitate this process when they witness misconducts have the potential to pre-emptively mitigate ethical scandals (Treviño, 1992; Bjørkelo et al., 2011).

People may also be silenced, especially in context of power imbalance. This metaphorical use is usually related to the oppression of marginalized groups or as an act of resistance (Mahoney, 1996; Ferguson, 2003; Brown & Coupland, 2005; Wang and Huh, 2019). Although some contributions emphasize the role of power relationships in silence, silence is not restricted to contexts of power imbalance. Everyone can intentionally withhold his/her view such as silence by supervisors or silence among peers. Donaghey et al. (2011) argued that this withholding is not necessarily chosen by employees or a product of employees' motivations, but could also be a product of management.

The silences we examine in this contribution differ significantly on several grounds from the failure to voice. First, the silence considered in the existing literature (withholding of information) is ‘metaphorical’, while the silences studied here are literal or physical. Concretely, an individual can be noisy or speak while withholding crucial information. Second, the failure to voice is a *symptom* of something else (i.e., the decision to not deliver some information), while the silences studied (i.e., lack of auditory stimulation from the environment or/and by the considered individual(s)) are real-time processes. Third, the failure to voice assumes that someone else (e.g., collaborators and even an organization) is impacted, frequently negatively, because of the withheld information. This consequence is not sought or expected in the case of quiet environment or intentional practice of silence.

Lesson 1b: The study of metaphorical silence, or failure to voice yielded considerable advances, notably by examining when and why employees choose to speak up/out or remain silent, and the individual and organizational implications of these choices (Morrison, 2023). Nevertheless, the literal and real-time silences studied in this contribution differ on several dimensions and deserve more attention, particularly with regard to the potential consequences for the health, well-being and/or performance of individuals and organizations.

3. A lesson from the past: the use of silence in some (secular) organizations

“Silence is a source of great strength” (Lao Tzu, Tao Te Ching, 600s BC)

Noisy environments are not a completely new issue. Indeed, one of the oldest literary texts, the *Epic of Gilgamesh*, reports that the gods were disturbed by the noise of humanity and,

consequently, they decided to destroy the humans. This story emphasizes how much silence can be valuable and how the absence of quietness can lead to extreme and harmful consequences. Moreover, the preeminent role of silence (as the lack of speech) in several centuries-old organizations (e.g., religious and spiritual orders), inseparable from the quest of wisdom presented as the quintessence of human nature, offers a stark contrast with the crucial importance of speech and noise in most organizations today (e.g., some businessmen, politicians or others, who consider them as essential to actively and permanently demonstrate their *leadership*, presence or dynamism).

In communities like Quakers (Reis Louis, 1994; Ferguson, 2003; Molina-Markham, 2014) or Carthusian (Waistell, 2018) ones, silence is “golden”, practiced as an organizing principle, and contributes to build resilience capacity. Lewis (2009) recommended a revival of Quaker methods, especially when considering the poor-quality decisions emerging from many corporate conference rooms. Quaker meetings begin and end with silence. Communal silence plays a major role in the decision-making process called finding “the sense of the meeting.” Silence is a shared experience that may be invoked when an impasse occurs. The process takes precedence over its outcome. In decision-making and discussion practices, brief silence is allowed in order to reach unity (not unanimity or consensus) on difficult issues (Reis Louis, 1994; Molina-Markham, 2014) and even contributes to create new realities (Dupret, 2018). Molina-Markham (2014) advances that moments of silence could have served to “minimize the potential face threat to others of expressing a different opinion in decision making because expressions of differing opinions by participants did not immediately follow what had previously been said”, frequently leading to significant shifts in opinion after periods of silence. Interestingly, rather than using voting procedures, which separate a group into those who agree and those who disagree, the “sense of the meeting” seeks to “include everyone,

recognizing that disagreement of some participants is an element of the “sense of the meeting” (Molina-Markham, 2014).

Other organizations such as elite sports teams also use silence (e.g., when a coach refrains from talking while the context [half-time] could be noisy) to achieve better performance in highly stressful or competitive environments (Villemus, 2018). Although silence can be considered as coaches being “off-task” from an observer’s perspective, one can consider on the contrary that silent management is a way to notably maintain a sense of autonomy and confidence, facilitate an independent learning approach (Smith & Cushion, 2006), and allow coaches a better observation and reflection before deploying an intervention (Van Lingen, 1997). Whereas ‘silent’ coaches (but active observers) apply what would be the recommendations of a Taoist sage, acting only at an appropriate time and with the right measure, ‘verbal’ coaches, by providing instructions quasi-permanently, externalize the exercisers’ attention and energy (Irwin et al., 2013) and dilute the impact of their intervention (Cushion & Jones, 2001). An interesting gap in the literature relates to the individual and organizational consequences (e.g., in terms of well-being or performances) of noisy versus silent leaders.

Lesson 2: Several (secular) organizations value quiet environments and the voluntary practice of silence to organize and manage, while most modern organizations are not fully aware of this potential. They offer a legacy that invites to learn from their use of silence in various settings.

4. Looking ahead: introducing quiet environments and the intentional practice of silence

As stated before, other kinds of silence, namely (i) *quiet environments*, in opposition to noisy ones, and (ii) *the intentional practice of silence*, notably when someone deliberately refrains

him/herself from speaking have been overlooked. When the term is used in academic literature, it is generally with distinct definitions, motivations, internal processes and implications. For instance, a collaborator can be silenced and literally speaking. S/he can withhold useful information, deprive the organization from valuable inputs, and deliver loudly what seems aligned with the dominant view, generating “facades of conformity” (Hewlin, 2003) which could be a rational behaviour for the individual, but probably irrelevant for the organization performances.

Unlike the absence of utterances that assumes a communication setting and the failure to voice that assumes an organizational setting, quiet environments and an intentional practice of silence can be applied by almost everyone on a voluntary basis, without requiring a communication or organizational setting.³ These silences can lead to valuable inputs (e.g., resilience boost, preparation for decision-making, voice facilitator, active listening) that will ultimately serve the individual and organization (Gross, 2014; Waistell, 2018).

Silence does not occur in a vacuum and has degrees. Its perception is notably influenced by what immediately preceded it, as it is the case in a piece of music. A very noisy period can make the following silence deafening while the same silence would be perceived as less intense if the previous period was only moderately noisy. In an anechoic chamber, the background noise is well below the threshold of human hearing and measured in negative decibels (Prisco, 2018). This deep silence is often disorienting for human beings. In short, we do not consider silence in an absolute meaning, but as *a relative and temporary state characterized by the relative absence of noise and/or speech*. This state is temporary because

³ Some people can, however, experience difficulties to freely practice silence because of trouble concentrating, with distracting thoughts and being preoccupied with worries. This issue is beyond the scope of our paper and suggests an extended definition of silence where an individual has to manage his/her own thoughts to reach a kind of internal silence that can be to some extent independent of benefiting from a quiet environment or resting the mental reflexes involved in social interactions (e.g., thinking about what to say).

it is likely and almost unavoidable that some auditory stimuli will soon or later break it. This state can be used in various ways: to benefit from quiet or uninterrupted time, reach greater levels of mindfulness and reflection (see Hyland et al., 2015), make one more receptive to others' inputs, or strategically influence others' reactions. The same silence can be used to facilitate higher level of analytical thinking and indicate the appropriate behaviour to others (Gross, 2014).

These silences can be characterized along several dimensions (e.g., duration, intentions of (or ascribed to) the silent individual or group) and can be freely practiced or institutionalized, on a regular or irregular basis, individually or collectively. For instance, silence can be individually and informally practiced in the organization, such as when an employee decides to use a quiet zone to contemplate, or when s/he decides to offer a more receptive ear to someone else (active listening). Practicing silence can be a “golden rule” for recruiters to ensure that candidates are allowed to speak most of the time. Silence can also be instituted in the organization even if it is individually practiced, such as when employees are encouraged to consider silent retreats or meals. Silence can also be informally and collectively practiced (e.g., “minutes of silence”) or instituted and collectively practiced (e.g., silent meetings) (Rogelberg, 2018; Rogelberg & Kreamer, 2019). Silence-related characteristics can constitute attractive features for some job applicants. The design company Navy instituted daily “quiet times” with the first half of each day being spent in silence, meaning no phone, emails, and meetings, and for most employees, no talking. As a result, the company claimed a 23% increase in productivity and a stress decrease (Campbell, 2015). These silences frequently require efforts to be preserved. But there exists clearly a potential for further research focused on the use of silence to improve individual and collective performance.

For sake of exposition, we select two dimensions for their potential to allow a mapping of silence in vocational contexts: the voluntary or imposed nature of the silence and

its individual versus collective practice (Figure 1). It is worthy to notice that the distinction between voluntary and imposed silence overlaps a classical distinction in the literature regarding whether silence is intentional or unintentional (e.g., Kurzon, 2007). We discuss the four quadrants to better characterize them, provide examples and illustrations, emphasize some likely consequences, but without purporting to be exhaustive given the richness of each quadrant.

First, silence can be imposed on the individual, such as when a teacher (or parent) asks a student (kid) to stop talking or making noise in order to reflect in silence and solve the problem at stake (A). This silence is unintentional from the silenced individual perspective. This injunction can also arise in some circumstances such as when someone breaks the expected silence in a library, place of worship, or in a quiet zone. In the student example, the noisy individual can be called to order by a sign on a wall even if s/he is alone. This demand frequently aims at avoiding distracting auditory inputs, helping focus or sometimes preventing the enunciation of some topics. The consequences can be aligned with desirable (or undesirable) goals such as parents willing to increase the focus of their kids (a superior willing to avoid the enunciation of some details by cutting a collaborator off). The latter example when someone is silenced for dubious reasons shares many features with the failure to voice and does not really correspond to our research topic. Second, silence can be voluntary and individual, such as when an individual follows a vow of silence or disciplines him/herself not to talk (B). This voluntary or intentional practice of an individual silence is very interesting because it originates from the individual him/herself. This silence frequently allows him/her to stop the requiring mental process of constantly talking or thinking about what to say and step back on the situation. This practice can help focus and facilitate a deeper reflection without the distraction of thinking on what to say next. Third, silence can be imposed and collective, such as silent meetings or minutes of silence (C). We also know

colleagues who ask their students a short period of silence at the beginning of the course, supposed to encourage concentration and listening, and to help learning. This collective silence can help to reach a kind of social attunement which would be otherwise difficult. In this case, imposed silence does not necessarily imply unintentionality, given that an individual can decide intentionally to participate in this collective and imposed silence. Sometimes, silence is institutionally determined, such as in some places or circumstances, e.g., schools, battle sites or funeral, where students or attendees are expected to be silent. Fourth, the last quadrant corresponds to voluntarily practiced silence at a collective level, such as diners in silence (D). This voluntary and collective practice allows the emergence of solutions that were not considered otherwise. For instance, the communal practice of silence during Quaker meetings plays an active role in decision making through a process understood to take precedence over its outcome (Molina-Markham, 2014).

Insert Figure 1 about here

In short, there is not something like neutral silence in organizations. The multidimensional consequences of silence can contribute to the smooth functioning of the organization and help it to reach its objectives but can also significantly impair its functioning.

Silence (as an absence of auditory and non-auditory distractions) is also frequently associated with other concepts, such as addressing privacy concerns in open office space or reducing disturbances in agile methods or mindfulness to quote a few. While open office space has been recommended for various reasons, including cost cutting considerations, facilitating collisions and interactions, privacy and quietness are threatened in this environment. Bernstein and Turban (2018; see also Kim & de Dear, 2013) argued that open

offices cause people to exert efforts to avoid distraction but also offer the permanent presence of an audience and the subsequent need to look busy. As a consequence, the volume of face-to-face interactions (and their expected positive outcomes) decreased significantly. It is likely that the managerial focus on open offices underestimates the potential benefits that quiet zones can bring to employees, and the impacts that noise can have on performance. Similarly, agile methods offer the possibility of limiting disturbances and associated stress, by preserving employees from undesirable distractions or solicitations (see Pfeiffer, Sauer & Ritter, 2019) and offering a space that can potentially deliver some forms of calm and silence. In the case of mindfulness, silence could be a constitutive element. At the same time, mindfulness requires rules, tools and some sophisticated training with a mentor to be adequately applied while quiet zones and the practice of silence have an architectural nature, are simpler to apply, and can be performed without these elements. In short, silence as defined in our contribution overlaps to some extent many related concepts and can lead to similar observable outcomes, which could create some ambiguity on causes and effects.

Lesson 3: The analysis of quiet environments and the intentional practice of silence at the individual or collective levels as a real time processes can enrich the management and organizational literature. These kinds of silence can be characterized according to whether they are voluntary or imposed, and individually or collectively practiced. These silences can have profound implications for individuals and organizations such as introducing silence opportunities or reworking the environment design.

5. Silence as a catalyst to prompt reflection

In a recent article, Curhan et al. (2021) theorized and found empirical evidence that silence, in negotiation settings, triggers internal reflection, which in turn engenders value creation. They

argued that extended silence can pause the flow of attentional, cognitive, and social demands of the interaction, giving to one or both parties time to reflect and consider how best to proceed. Most human interactions in organizations, even basic ones such as listening, speaking or arguing are attention, cognition and socially demanding. For instance, Zorn and Marz (2017) argued that in many organizational settings, several interactions require a high cognitive load for individuals who have to think about whether to say something, what to say or write and how to do it. Bernardi et al (2006) found convincing evidence that silence decreases physiological arousal that could otherwise disturb reflective thinking (Strack & Deutsch, 2004).

The theoretical perspective that silence (or quiet environments) causes higher reflection has some empirical support in various domains such as therapy (Ladany et al., 2004; see also Dupret, 2018), teaching and learning, negotiation or communication (Curhan et al., 2021 and references therein), or idea generation (Bigo, 2018). Being overwhelmed with various (auditory) unsolicited stimuli can prevent individuals to reflect and process information profoundly. However, benefiting from a quiet environment possibly mixed with the practice of silence can facilitate increased deliberation and analysis, which is more likely to generate better decisions (see evidence reported in Beshears & Gino, 2015). Zorn and Marz (2022) report an emblematic case where, in 1787, the framers of the U.S. Constitution ordered the construction of a giant mound of dirt in the street in front of the Independence Hall because the “noises caused by horse-drawn carriages, street vendors, and conversations outside would disturb the intense concentration that would be necessary for completing their task”. Interestingly, this quest for silence did not mean an absolute silence, given that participants had to discuss and debate, but how much a quiet environment was likely to facilitate their challenging mission.

Let us, however, remind an important caveat. We do not argue that introducing silence systematically in decision-making processes will improve individual and organizational performances. Rather, we posit that managers can act as architects by introducing or just proposing silence when there is a clear need for intense concentration and deliberation. Consequently, thanks to its restorative functions (see more below), we also posit that silence can help to replenish the cognitive energy and allow an extended concentration and deliberation, that can be crucial for some occupations (e.g., ranchers or spiritual meditators). Considered from this perspective, silence can even constitute an organizational resource.

Lesson 4: Silence has the potential to facilitate intense concentration and reflection, by reducing the number of stimuli. It can even play a restorative function, leading to prolong deliberation operations.

6. Individual and organizational effects of quiet environments and the intentional practice of silence

“Unnecessary noise is the most cruel absence of care that can be inflicted on the sick or well.” (Florence Nightingale, Notes on Nursing, 1859)

Quiet environments and the intentional practice of silence can constitute a means to achieve other purposes or an end in themselves. Quietness, magnified in several natural settings, plays a restorative function (Kaplan, 1995). Some business initiatives seek to harness the restorative promise of silence such as the hotel chain *Relais du Silence* or the tourism board of Finland that used silence as the major argument in its recent marketing campaign: “Silence, Please”.⁴ Offering quiet spaces can constitute a natural step towards silence with considerable health,

⁴ <https://www.visitfinland.com/silence-please/>

managerial, and economic benefits (Hygge et al., 2002; World Health Organization, 2011). A natural corollary of quiet environments is the reduction of unwanted or undesirable noise. Human-made noise –such as speaking, phones, and air conditioning – substantially impairs several aspects of organizational performances, by undermining productivity, decreasing motivation, and deteriorating employees’ health and well-being (Sundstrom et al., 1994; Evans & Johnson, 2000). Nevertheless, all forms of noise and all forms of silence are not created equal. Conversational noise is regarded as the most distractive noise to the human ear and can be detrimental for certain organizational performances whereas natural sounds such as flowing water in offices can boost workers’ moods and improve cognitive abilities in addition to providing speech privacy (DeLoach et al., 2015).

Applying “the dose makes the poison” adage to silence, it is crucial to determine the adequate dose for the individual and his/her organization. While too little silence can be detrimental, too much silence can also lead to the same result. In hospitals, a patient endures 350 alarms each day, with most of them are false positives (Jones, 2014). While some kinds of speech and noise can help the staff to care of patients, we suggest to examine the dose and timing. Operationalizing this recommendation is far from easy. A first step could be to increase our knowledge of noise and silence sources and characteristics (e.g., duration, intensity, subjective assessments) to form workplace soundscapes (Lester et al., 2001). Determining the impacts of these sound contexts on the outcomes of various kinds of individuals inside an organization thanks to experimental studies and raising awareness of concerned individuals and organizations could constitute the next steps.⁵

⁵ Several approaches can be used to reduce exposure to noise, such as hearing protection, planning quiet zones, rethinking building design, or purchasing equipment based on noise scoring. A smart design of workspaces with built-in flexibility can even ease alternation among environments optimized for different tasks by considering their noise side effect. Nevertheless, awareness frequently constitutes a prerequisite to consider these approaches.

We speculate that the effect of appropriate silence on organizational performances is likely to follow a U-inverted curve. The fight against harmful noise can constitute a permanent goal in itself, but creating quiet zones in the spatial and/or temporal dimensions can indicate that the organization recognizes the value of silence. Nevertheless, silence spaces should not serve as loopholes, simply to escape important realities. Moreover, there are situations where the doses of silence for various objectives or implied parties are not necessarily aligned, which could generate complex decisions. For instance, if silence leads employees to work harder for the benefit of shareholders, it is legitimate to question whether this productivity increase is desirable for the employees whose efforts might lead them to experience stress, repetitive strain injuries and so forth. Benefiting from quiet environment requires a profound understanding of what silence can and cannot deliver and under which circumstances. For instance, some vocational choices can partly correspond to silence-related features that allow a good matching between the individual's aspirations (e.g. quiet environments, practicing silence) and the occupational characteristics or requirements such as park rangers, farmers or spiritual meditators. In some cases, the environment (e.g., board room, meeting) can be designed to generate quiet times that will facilitate reflection and decision making.

Lesson 5: Quiet environments are scarce in today life, but some occupations deliver more silence than others. The space devoted to silence is sometimes a legacy from the past or intentionally designed to facilitate some processes such as individual reflection and collective decision-making. Noise reduction and silence if applied in appropriate dose, well-interpreted and timing can deliver tangible benefits to individuals and organizations, but inappropriate or excessive use can also harm. Silence-related occupations or environments can also serve as differentiating and attracting levers.

The intentional practice of silence is accessible to everyone, but does not mean the same thing for everyone. Silence can constitute an internal-discipline device in an organization, allowing individuals connected to everything except themselves to reverse the trend. Sometimes, the voluntary practice of silence allows to rest some mental reflexes and take a temporary break from thinking to what to do or say (Zorn & Marz, 2017). In other cases, this practice is used to help an individual to reach higher levels of concentration, foster contemplation and make more ethically-minded decisions (Cain, 2012; Gunia et al., 2012). While noisy environments are often detrimental as they interfere with self-regulation, silence can also play a buffer role and serve as an emotion regulator, which could be relevant in contexts with tensions and pressures. Recent findings suggest that silence can significantly increase relaxation and improve mood states (Pfeifer & Wittmann, 2020; see also Bernardi et al., 2006). The literature does not adequately account for the interplay of emotion and silence. Silence can help to slow down, step back and take stock, regulate emotions and reach better decisions and behaviors by facilitating the focus and concentration of individuals. Moreover, Pfeifer and Wittmann (2020) advance that in a world where collaborators suffer from a lack of meaning (with negative impact on well-being, performance, resilience, work quality, and engagement), silence can constitute a path to explore.

The study of silence at the group level has been somewhat neglected despite its potential relevance. Silence can enhance communication and coordination with others, especially in groups operating in urgent situations (e.g., surgery, diver units, elite units). Practicing silence collectively can create a context favorable to decision-making and offer an original way to reach a kind of social attunement (as exemplified in the 8:46 moment of silence for George Floyd). The collective practice of silence, if well-timed, can allow to avoid emotional escalation and serve as a collective emotional regulator.

A very common practice in many organizations is meetings, which are frequently considered as unproductive, and time-, energy- and money-consuming. In the United States, unproductive meetings have been estimated to cost \$37 billion annually, leading some experts to recommend their elimination (Pittampalli, 2011). In a meeting, people talk a lot and the loudest speakers frequently dominate. “Silent” meetings offer an alternative. They start with a period of silence that is usually devoted to individual reading and reflection regarding the issues to be considered. Participants are asked to not speak, usually for a 30-minute period, to allow everyone to analyze the issues involved. This meeting design gives everyone a fair chance to speak up and share his/her thoughts, although some participants are working remotely (Rogelberg, 2018; Rogelberg & Kremer, 2019). For instance, comments and suggestions can be made anonymously, allowing ideas to emerge from anyone, regardless of the job position or personality. This arrangement can avoid the crowding-out of inputs from quieter collaborators by louder voices. Other benefits include less repetition, more creativity, and a better use of time. Silent meetings help to avoid the bias that systematically favors the loudest, and most socially-confident and politically-connected speaker and give a chance to the contemplative and less-socially confident individuals who are often neglected in organizations (Cain, 2012). Obviously, the practice of silence can sometimes be instrumentalized for self-interested purposes, such as misleading others on the intents of the silent individuals or misunderstood, by ascribing erroneous intents to silent individuals. Interestingly, it is not silence itself, or its practice, that cause these undesirable effects but their (unscrupulous) manipulation and interpretation to advance vested interests. This situation stresses the need to design an appropriate framework, likely to reduce these undesirable effects.

Lesson 6: The intentional practice of silence is likely to affect several individual and collective processes such as information processing, reflection or decision making. As a consequence, silence can also intervene in individual performance and well-being or contribute to the functioning of groups. These effects are more likely when individuals need to focus, concentrate, self-regulate and reach clarity, especially in environments where they face a multitude of unwanted stimuli and interferences. When the affect-based System 1 is likely to drive the thinking, introducing silence can facilitate mobilizing the deliberation-based System 2.

7. Final remarks

For individuals and organizations, silence is a double-edged (s)word. In communication, the proper interpretation of silence is highly perspective- and context-dependent. In organizational behaviour, the failure to voice frequently deprives the organization from valuable inputs. We examined two other kinds of silence, precisely quiet environments and the intentional practice of silence as real time activities that require efforts to be preserved.

Several of the rationales provided about the potential benefits of quiet spaces or practicing silence are to some extent similar to those researchers use to explain the beneficial effects associated with other practices (e.g., mindfulness, meditation, having breaks). In these practices as in noise control experiment,⁶ silence is merely a symptom (e.g., a state that can be achieved by making a break or using control). While we introduce new concepts with new

⁶ Scholars experimentally showed that the simple possibility given to an individual to terminate noise and enjoying some silence if desired (like a “control button”) can be enough to improve his/her concentration and performance in arduous tasks, even if the involved individual does not press the button (Glass & Singer, 1973).

names, some implications for organizations and management are similar to those drawn from existing practices while others are different.

Similarly, the rationales provided about the negative effects of not practicing silence overlap with the detrimental effects proposed by researchers studying other situations, such as impulsivity, hot emotional states, and impatience. Nevertheless, several fields, like industrial and organizational psychology or management, can benefit from a better knowledge and understanding of these constructs. Several reasons can justify why we need to make room for silence in the literature and consider it as differing from other constructs such as mindfulness, meditation, psychological detachment, and/or recovery. First, there is the architectural nature of a “quiet zone” or a “voluntary practice of silence” that makes these constructs distinct. Second, while several of the above-mentioned constructs require rules, tools and some training to be adequately applied, quiet zones and the practice of silence can be considered and performed without these elements. A quiet environment and the practice of silence do not need a sophisticated meditation practice. Third, the proposed constructs can be better understood by paying attention to their (conceptual) opposites “noisy zones” and “speaking continuously or all the time”. These opposites emphasize that individuals are frequently overwhelmed with (auditory) stimuli and constantly preoccupied on what to say. Interestingly, these opposites mainly originate from outside the considered individual (his/her environment and social interactions) while other situations (e.g., impulsivity, hot emotional states and impatience) do not require or even assume this outside origin. Fourth, in some cases, silence itself is more important than its possible consequences and takes precedence over the individual or organizational outcomes and is sought for itself. Last and not least, although some aspects of silence have been discussed in scholarly contributions under various labels, we are bound to recognize that these approaches (e.g., mindfulness, having breaks) have led

to limited changes (e.g., introducing break rooms) but not (yet) to a full integration into management and organizational systems.

We theorized that these silences can allow to take a break regarding constant and unwanted solicitations and serve as catalysts for facilitating increased focus and concentration. Given their high potential to deliver valuable outcomes and to contribute to individual and collective performance, understanding why these silences are so under-valued in modern organizations is worth investigating. *It is probably not easy to assess the perspectives for performance that quiet times can offer. The dysfunctions generated by noise, or the benefits associated with periods of quietness, all other things being equal, are difficult to measure, especially with a classic accounting approach. But not impossible. The significant potential in terms of return on investment for organizations, and in terms of well-being for people, provides a very exciting avenue of research, especially in the fields of human resources, management control and organizational behaviour.*

These silences cannot be used to address to solve any problem as a universal solution, and might even harm an organization functioning if overutilized or misplaced. We believe that exploring how the power of silence can contribute to both individual and organizational functioning may be as golden a prospect as silence itself is said to be. Examining both what is lost by modern workplace organizations due to a lack of silence, and what can be gained, including in terms of individual well-being, productivity, human resource management or efficiency, with a better harnessing of the power of silence, is promising in managerial and organizational processes. A major issue is that the positive or negative effects of silence are difficult to measure and they do not (yet) appear in organizations' accounts. A better understanding of individual and collective effects of these intentional silences could reveal a potential for improved management and performance. Managers and other individuals work with words (Farrow et al., 2018; Grolleau et al., 2022), but not only. They also work with

silences. Leaders and managers can become architects of silence who exploit its power to make the workplace and the world a better place.

References

- Bashshur, M. R., & Oc, B. (2015). When voice matters: A multi-level review of the impact of voice in organizations. *Journal of Management*, 41(5), 1530–1554.
- Bernardi, L., Porta, C., & Sleight, P. (2006). Cardiovascular, cerebrovascular, and respiratory changes induced by different types of music in musicians and non-musicians: The importance of silence. *Heart*, 92(4), 445–452.
- Bernstein, E., & Waber, B. (2019). The truth about open offices. *Harvard Business Review*, 97(6), <https://hbr.org/2019/11/the-truth-about-open-offices>
- Bernstein, E. S., & Turban, S. (2018). The impact of the ‘open’ workspace on human collaboration. *Philosophical Transactions of the Royal Society B: Biological Sciences*, 373(1753), 20170239.
- Beshears, J., & Gino, F. (2015). Leaders as decision architects: Structure your organization’s work to encourage wise choices. *Harvard Business Review*, 93, 52–62.
- Bigo, V. (2018). On silence, creativity and ethics in organization studies. *Organization Studies*, 39(1), 121–133.
- Biguenet, J. (2015). The luxury of silence. *The Atlantic*, October, 3, <https://www.theatlantic.com/entertainment/archive/2015/10/how-silence-became-a-luxury-good/408412/>
- Bird, F. B. (1996). *The muted conscience: Moral silence and the practice of ethics in business*. Quorum Books.

- Bjørkelo, B., Einarsen, S., Nielson, M. B., & Matthiesen, S. B. (2011). Silence is golden? Characteristics and experiences of self-reported whistleblowers. *European Journal of Work and Organizational Psychology*, 20(2), 206–238.
- Brinsfield, C. T. (2013). Employee silence motives: Investigation of dimensionality and development of measures. *Journal of Organizational Behavior*, 34(5), 671–697.
- Brooks, D. (2022). The Immortal Awfulness of Open Plan Workplaces, *The New York Times*, September, 8, <https://www.nytimes.com/2022/09/08/opinion/open-plan-office-awful.html>
- Brown, A. D. & Coupland, C. (2005). Sounds of silence: Graduate trainees, hegemony and resistance. *Organization Studies*, 26(7), 1049–1069.
- Cain, S. (2012). *Quiet: The power of introverts in a world that can't stop talking*. Crown Publishing Group/Random House, Inc.
- Calisi, C., & Stout, J. (2015). Stop noise from ruining your open office. *Harvard Business Review*, March 16.
- Campbell, O. (2015). Quiet time. How working in silence made us 23% more productive, and how you can do it too. *Medium*, October 27. <https://medium.com/@oliebol/quiet-time-969ccc3416f8>
- Curhan, J. R., Overbeck, J. R., Cho, Y., Zhang, T., & Yang, Y. (2021). Silence is golden: Extended silence, deliberative mindset, and value creation in negotiation. *Journal of Applied Psychology*.
- Cushion, C. J., & Jones, R. L. (2001). A systematic observation of professional top-level youth soccer coaches. *Journal of Sport Behavior*, 24(4), 354–376.
- DeLoach, A. G., Carter, J. P., & Braasch, J. (2015). Tuning the cognitive environment: Sound masking with “natural” sounds in open-plan offices. *Journal of the Acoustical Society of America*, 137, 2291.

- Donaghey, J., Cullinane, N., Dundon, T., & Wilkinson, A. (2011). Reconceptualising employee silence: problems and prognosis. *Work, employment and society*, 25(1), 51–67.
- Dupret, K. (2018). Performative silences: Potentiality of organizational change. *Organization Studies*, 40(5), 681–703.
- Evans, G. W., & Johnson, D. (2000). Stress and open-office noise. *Journal of Applied Psychology*, 85(5), 779–783.
- Farrow, K., Grolleau, G., & Mzoughi, N. (2018). What in the word! The scope for the effect of word choice on economic behavior. *Kyklos*, 71, 557–580
- Ferguson, K. (2003). Silence: A politics. *Contemporary Political Theory*, 2, 49–65.
- Fisher, J. A. (1998). What the hills are alive with: In defense of the sounds of nature. *Journal of Aesthetics and Art Criticism*, 56(2), 167–179.
- Glass, D. C., & Singer, J. E. (1973). Experimental studies of uncontrollable and unpredictable noise. *Representative Research in Social Psychology*, 4(1), 165–183.
- Grolleau, G., Mzoughi, N., Peterson, D., & Tendero, M. (2022). Changing the world with words? Euphemisms in climate change issues. *Ecological Economics*, 193, 107307.
- Gross, D. A. (2014). This is your brain on silence. *Nautilus*, August 21. <http://nautil.us/issue/16/nothingness/this-is-your-brain-on-silence?>
- Gunia, B. C., Wang, L., Huang, L., Wang, J., & Murnighan, J. K. (2012). Contemplation and conversation: Subtle influences on moral decision making. *Academy of Management Journal*, 55(1), 13–33.
- Hao, L., Zhu, H., He, Y., Duan, J., Zhao, T., & Meng, H. (2022). When is silence golden? A meta-analysis on antecedents and outcomes of employee silence. *Journal of Business and Psychology*, 1–25.
- Hewlin, P. F. (2003). And the award for best actor goes to...: Facades of conformity in organizational settings. *Academy of Management Review*, 28(4), 633–642.

- Hirschman, A. O. (1970). *Exit, voice, and loyalty: Responses to decline in firms, organizations, and states*. Harvard University Press.
- Hygge, S., Evans, G. W., & Bullinger, M. (2002). A prospective study of some effects of aircraft noise on cognitive performance in schoolchildren. *Psychological Science*, 13(5), 469–474.
- Hyland, P. K., Lee, R. A., & Mills, M. J. (2015). Mindfulness at work: A new approach to improving individual and organizational performance. *Industrial and Organizational Psychology*, 8(4), 576–602.
- Irwin, B. C., Feltz, D. L., & Kerr, N. L. (2013). Silence is golden: Effect of encouragement in motivating the weak link in an online exercise video game. *Journal of Medical Internet Research*, 15(6), e104.
- Jensen, J. V. (1973). Communicative functions of silence. *ETC: A Review of General Semantics*, 249–257.
- Johannesen, R. L. (1974). The functions of silence: A plea for communication research. *Western Journal of Communication*, 38(1), 25–35.
- Jones, K. (2014). Alarm fatigue a top patient safety hazard. *Canadian Medical Association Journal*, 186(3), 178.
- Kaplan, S. (1995). The restorative effects of nature: Towards an integrative framework. *Journal of Environmental Psychology*, 15(3), 169–182.
- Kim, J., & De Dear, R. (2013). Workspace satisfaction: The privacy-communication trade-off in open-plan offices. *Journal of Environmental Psychology*, 36, 18–26.
- Knoll, M., & Redman, T. (2016). Does the presence of voice imply the absence of silence? The necessity to consider employees' affective attachment and job engagement. *Human Resource Management*, 55(5), 829–844.

- Knoll, M., Wegge, J., Unterrainer, C., Silva, S., & Jønsson, T. (2016). Is our knowledge on voice and silence in organizations growing? Building bridges and (re)discovering opportunities. *German Journal of Human Resource Management*, 30(3-4), 161–194.
- Kurzon, D. (2007). Towards a typology of silence. *Journal of pragmatics*, 39(10), 1673–1688.
- Kurzon, D. (2011). On silence. *Journal of Pragmatics*, 9(43), 2275–2277.
- Ladany, N., Hill, C. E., Thompson, B. J., & O'Brien, K. M. (2004). Therapist perspectives on using silence in therapy: A qualitative study. *Counselling and Psychotherapy Research*, 4(1), 80–89.
- Lester, H., Malchaire, J., Arbey, H. S., & Thiery, L. (2001). Strategies for noise surveys. In B. Goelzer, H. C. Hansen, & A. G. Sehrndt (Eds.), *Occupational exposure to noise: Evaluation, prevention and control* (pp. 141–146). World Health Organization.
- Lewis, M. (2009). Doing business the Quaker way. *Forbes*, October 9. <https://www.forbes.com/2009/10/09/quaker-business-meetings-leadership-society-friends.html?sh=625781a829fa>
- Mahoney, M. A. (1996). The problem of silence in feminist psychology. *Feminist Studies*, 22(3), 603–625.
- Milliken, F. J., Morrison, E. W., & Hewlin, P. F. (2003). An exploratory study of employee silence: Issues that employees don't communicate upward and why. *Journal of Management Studies*, 40(6), 1453–1476.
- Molina-Markham, E. (2014). Finding the 'sense of the meeting': Decision making through silence among Quakers. *Western Journal of Communication*, 78(2), 155–174.
- Morrison, E. W. (2014). Employee voice and silence. *Annual Review of Organizational Psychology and Organizational Behavior*, 1, 173–197.
- Morrison, E. W., & Milliken, F. J. (2000). Organizational silence: A barrier to change and development in a pluralistic world. *Academy of Management Review*, 25(4), 706–725.

- Pfeiffer, S., Sauer, S., & Ritter, T. (2019). Agile methods as stress management tools? An empirical study. *Work Organisation, Labour & Globalisation*, 13(2), 20–36.
- Pfeifer, E., & Wittmann, M. (2020). Waiting, thinking, and feeling: Variations in the perception of time during silence. *Frontiers in Psychology*, 11, Article 602.
- Pinder, C. C., & Harlos, K. P. (2001). Employee silence: Quiescence and acquiescence as responses to perceived injustice. *Research in Personnel and Human Resource Management*, 20, 331–369.
- Pittampalli, A. (2011). *Read this before our next meeting*. The Domino Project.
- Prisco, J. (2018). Inside the world's quietest room. *CNN*, March 29. <https://edition.cnn.com/style/article/anechoic-chamber-worlds-quietest-room/index.html>
- Reis Louis, M. (1994). In the manner of friends: Learnings from Quaker practice for organizational renewal. *Journal of Organizational Change Management*, 7(1), 42–60.
- Rogelberg, S. G. (2018). *The surprising science of meetings*. Oxford University Press.
- Rogelberg, S. G., & Kreamer, L. (2019). The case for more silence in meetings. *Harvard Business Review*, June 14.
- Sander, E. L. J., Marques, C., Birt, J., Stead, M., & Baumann, O. (2021). Open-plan office noise is stressful: multimodal stress detection in a simulated work environment. *Journal of Management & Organization*, 27(6), 1021-1037.
- Sherf, E. N., Park, M. R., & Isaakyan, S. (2021). Distinguishing voice and silence at work: Unique relationships with perceived impact, psychological safety, and burnout. *Academy of Management Journal*, 64(1), 114–148.
- Smith, M., & Cushion, C. J. (2006). An investigation of the in-game behaviours of professional, top-level youth soccer coaches. *Journal of Sports Sciences*, 24(4), 355–366.
- Sundstrom, E., Town, J. P., Rice, R. W., Osborn, D. P., & Brill, M. (1994). Office noise, satisfaction, and performance. *Environment and Behavior*, 26(2), 195–222.

- Steelcase (2014) Seeking Mindfulness: Steelcase Study Reveals How to Help Employees Find Focus at Work, <https://www.steelcase.com/asia-en/press-releases/seeking-mindfulness-steelcase-study-reveals-help-employees-find-focus-work/>
- Strack, F., & Deutsch, R. (2004). Reflective and impulsive determinants of social behavior. *Personality and Social Psychology Review*, 8(3), 220–247.
- Tannen, D. (1985). Silence: anything but. *Perspectives on Silence*, Chapter 6, 93-111.
- Tannen, D., & Saville-Troike, M. (1985). *Perspectives on Silence*. Praeger.
- Treviño, L. K. (1992). The social effects of punishment in organizations: A justice perspective. *Academy of Management Review*, 17(4), 1–29.
- Valle, R. (2019). Toward a psychology of silence. *The Humanistic Psychologist*, 47(3), 219–261.
- Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and voice as multidimensional constructs. *Journal of Management Studies*, 40(6), 1359–1392.
- Van Lingen, B. (1997). *Coaching soccer: The official coaching book of the Dutch Soccer Association*. Reedswain.
- Villemus, P. (2018). Le calme et le silence comme clés de la performance en management. *La Tribune*, November 30. <https://www.latribune.fr/opinions/tribunes/le-calme-et-le-silence-comme-cles-de-la-performance-en-management-799366.html>
- Waistell, J. (2018). The salience of silence: The silence of salience. *Journal of Management, Spirituality and Religion*, 15(3), 211–228.
- Wang, Y. R., & Huh, Y. (2019). Empower the powerless: Practical implications for breaking silence. *Industrial and Organizational Psychology*, 12(3), 350–354.
- Weiss, M., & Morrison, E. W. (2019). Speaking up and moving up: How voice can enhance employees' social status. *Journal of Organizational Behavior*, 40(1), 5–19.

Wilkinson, A., Knoll, M., Mowbray, P. K., & Dundon, T. (2021). New trajectories in worker voice: Integrating and applying contemporary challenges in the organization of work. *British Journal of Management*, 32(3), 693–707.

World Health Organization (2011). Burden of disease from environmental noise. Quantification of healthy life years lost in Europe. http://www.euro.who.int/__data/assets/pdf_file/0008/136466/e94888.pdf

Zorn, J., & Marz, L. (2017). The busier you are, the more you need quiet time. *Harvard Business Review*, March 17.

Zorn, J., Marz, L. (2022). How to build a culture that honors quiet time. *Harvard Business Review*, May 24.

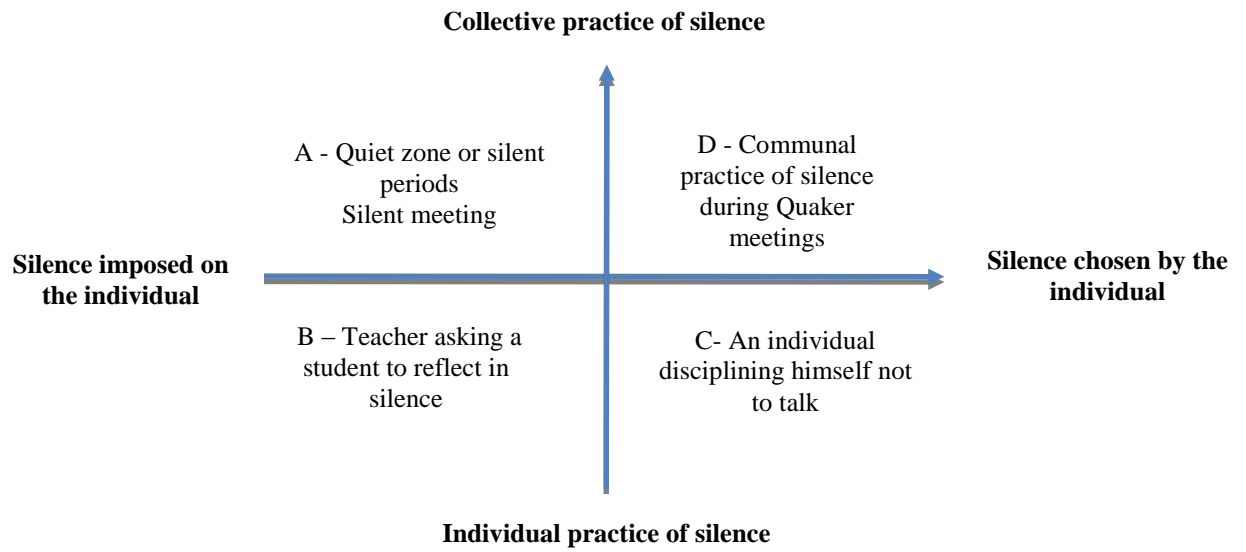


Figure 1. Characterizing silence in organizations along two dimensions (imposed versus chosen individual versus collective)