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The Restoration Perspective in Soundscape Research

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Restoration ...

... is a process of renewing or recovering a resource or capacity that has become depleted in meeting demands in everyday life.

	Stress Perspective	Coping Perspective	Restoration Perspective
Theoretical Premise	Heavy demands can undermine adaptation.	Readily available resources support adaptation.	Adaptation requires periodic restoration.
Practical Premise	Interventions can eliminate or mitigate demands.	Interventions can ensure the availability of resources.	Interventions can enhance opportunities for restoration.

From Hartig, Bringslimark, & Patil (2008); Hartig (2008).

The Restorative Environment ...

... is an environment that promotes (and not merely permits) restoration.

... involves psychological mechanisms that evoke positive affects and/or engage effortless attention.



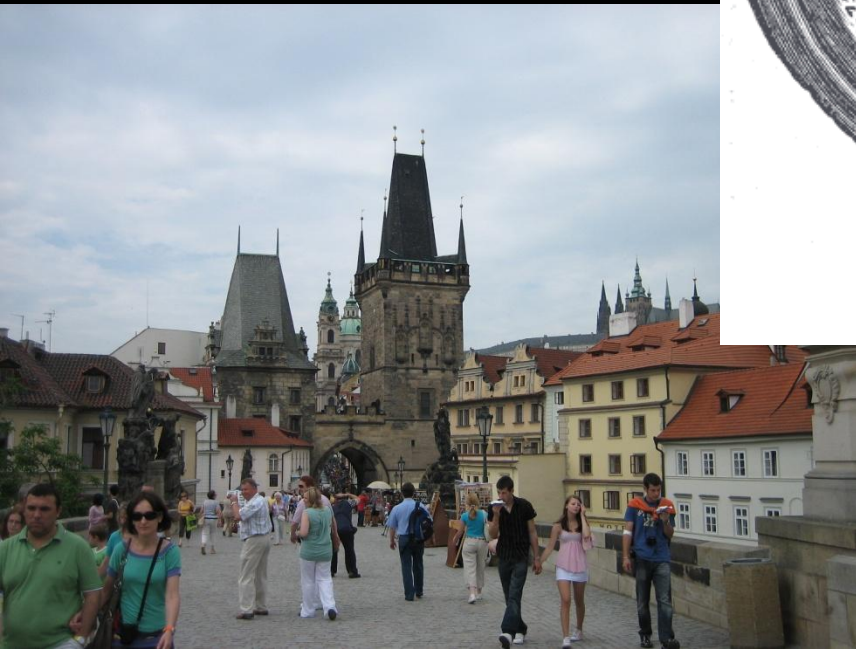
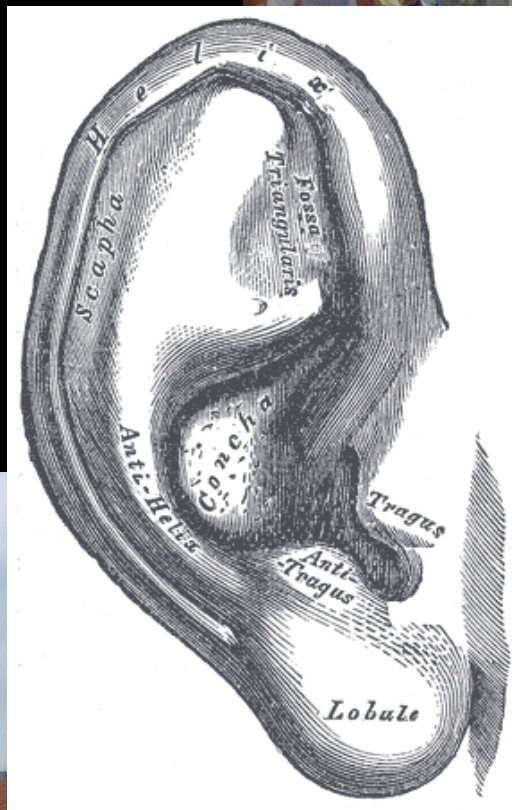








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Practical Applications

The restoration perspective directs attention to applications involving soundscapes that permit and/or promote restoration.

Restorative Soundscape Applications

	Permit Restoration	Promote Restoration
Protect Restorative Environment	Regulate noise sources and maintain norms of silence. 	Preserve valued sound sources and musical traditions in places. 
Provide Restorative Environment	Mask unwanted sounds that cannot be eliminated. 	Introduce pleasant and interesting sounds, such as music. 

Applications in Theory and Research

The restoration perspective suggests fruitful conceptual distinctions.

Noise as Stressor vs Constraint on Restoration

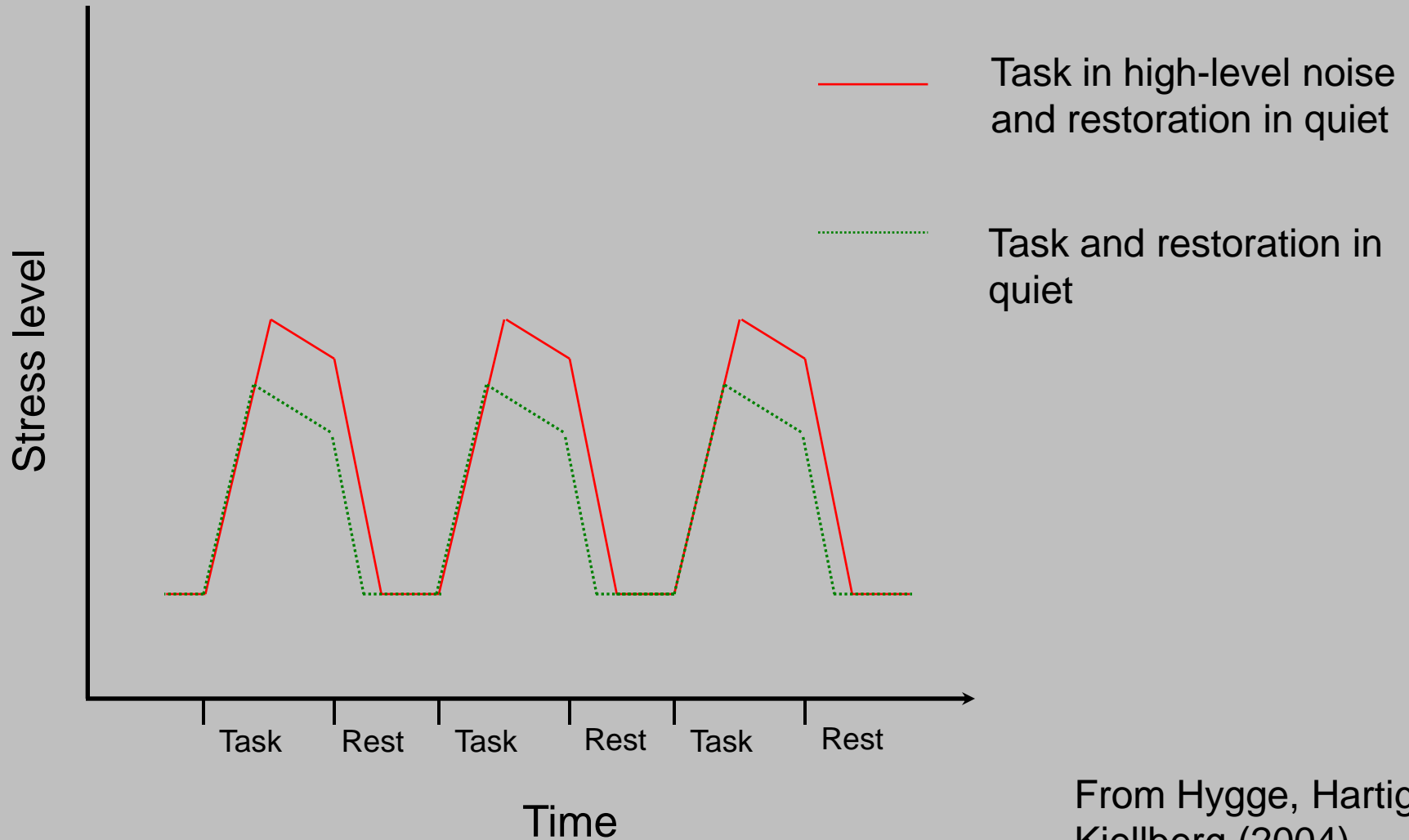
Does some unwanted sound work against health because it taxes resources or because it hinders recovery of resources depleted in efforts to meet other demands?

Contributors to Chronic Stress

1. Persistent demands.
2. Inability to acquire new resources that would make it easy to deal with those demands.
3. Inability to more effectively apply available resources.
4. Inability to adequately restore depleted coping resources.

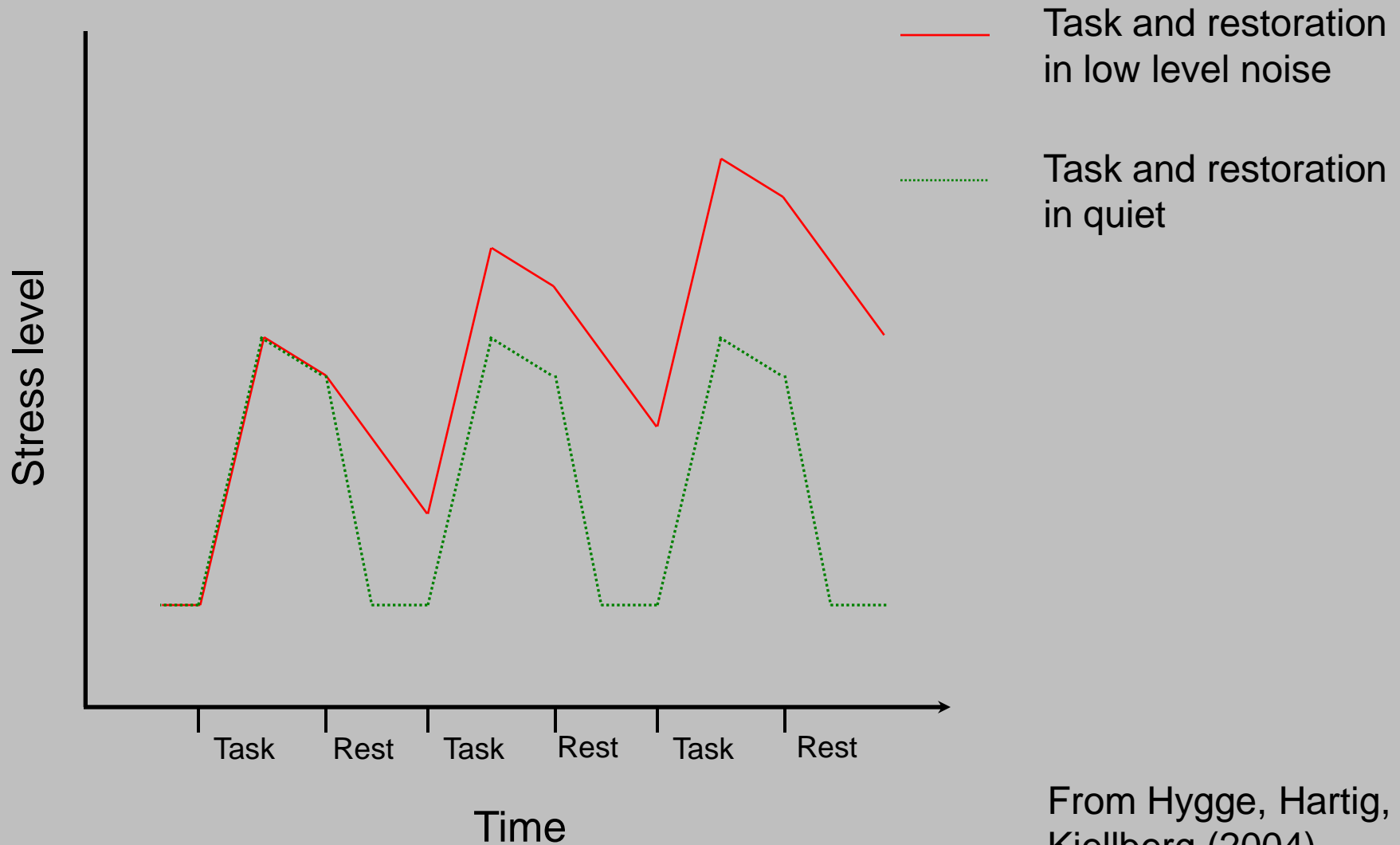
From Hartig, Catalano, & Ong (2007)

Noise as a Stressor – A Traditional View



From Hygge, Hartig, & Kjellberg (2004).

Noise as a Constraint on Restoration



From Hygge, Hartig, & Kjellberg (2004).

Distinguishing the Constraint of Restoration

Outside of a context dedicated to restoration, the sound would have low salience and receive a neutral appraisal.

Within a context dedicated to restoration, the sound would have high salience and annoy or irritate.

Community Noise as Constraint of Restoration

Community noise regulations commonly assume a moderating effect of context on noise annoyance, in that they impose stricter controls on sound levels in locations and at times normally dedicated to restoration.

Types of Restoration Constraint

Direct: unwanted sound reduces the restorative quality of the available activity/setting.

Indirect: unwanted sound leads the person or group to choose a less restorative activity/setting.

Recapitulation

The restoration perspective complements the stress and coping perspectives on adaptation.

The restoration perspective suggests strategies for managing and changing soundscapes to protect and provide opportunities for restoration.

The restoration perspective suggests a meaningful conceptual distinction between noise as stressor and noise as a constraint on restoration.

Thank you.

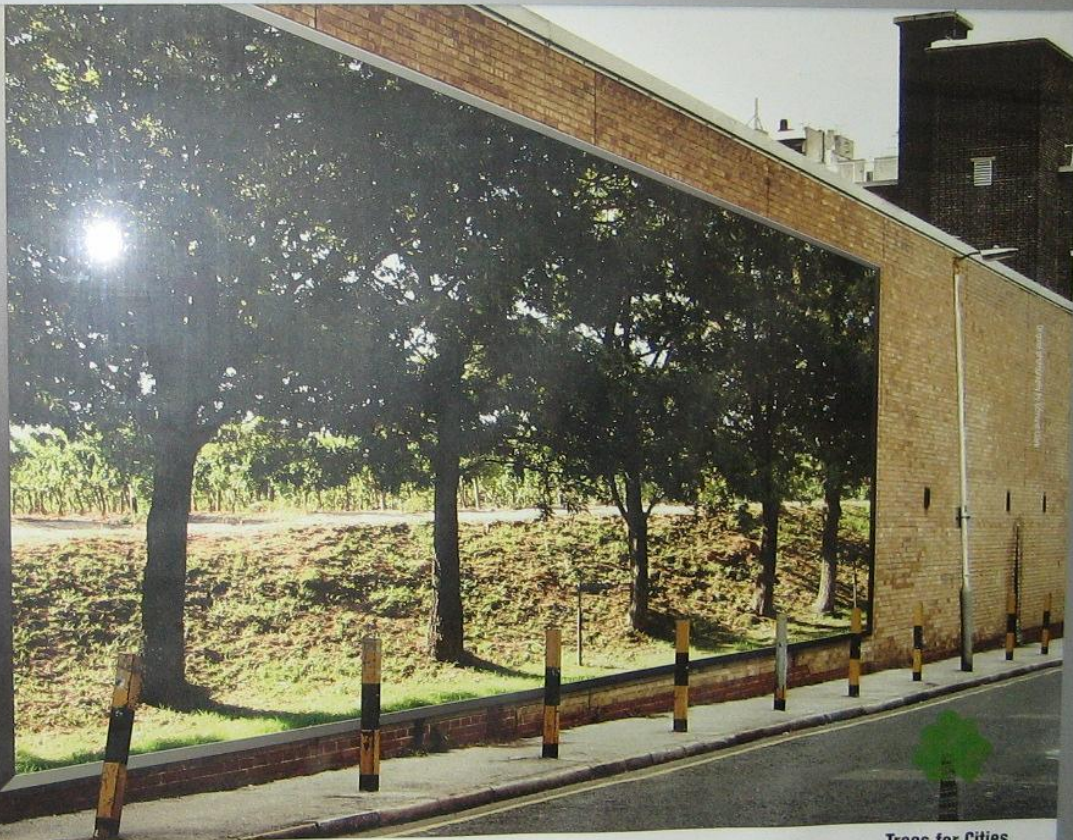
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References

- Hartig, T. (2008). Green space, psychological restoration, and health inequality. *Lancet*, 372, 1614-1615. [invited comment]
- Hartig, T., Bringslimark, T., & Grindal Patil, G. (2008). Restorative environmental design: What, when, where, and for whom? In S. R. Kellert, J. Heerwagen, & M. Mador (Eds.), *Bringing buildings to life: The theory and practice of biophilic building design* (pp. 133-151). New York: Wiley.
- Hartig, T., Catalano, R., & Ong, M. (2007). Cold summer weather, constrained restoration, and the use of anti-depressants in Sweden. *Journal of Environmental Psychology*, 27, 107-116.
- Hygge, S., Hartig, T., & Kjellberg, A. (2004). Noise in nature – environmental stressor or constraint on restoration? Invited symposium on “Restoration and restorative environments,” 28th International Congress of Psychology, Beijing, China, August 8-13.