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# Being an interpreter and Coping with Jet Lag

## Experience-based suggestions and a bit of science for traveling #terps who need to adapt to new time zones quickly

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## What this e-book is about

All traveling interpreters, especially those who fly across continents to fulfill assignments in distant locations, experience a sense of confusion or lack of concentration as they struggle to adapt to a different time zone.

This occurs every time our body's circadian rhythms are no longer in synch with the day/night cycle.

This e-book focuses on the physical and physiological reactions of our body to significant time zone change and adaptation strategies.

The first part deals with jet lag origin and characteristics.

The second part delves into the physiological reactions of our body to jet lag.

The last part is dedicated to the strategies we can adopt to improve our body's resilience to jet lag-induced stress.

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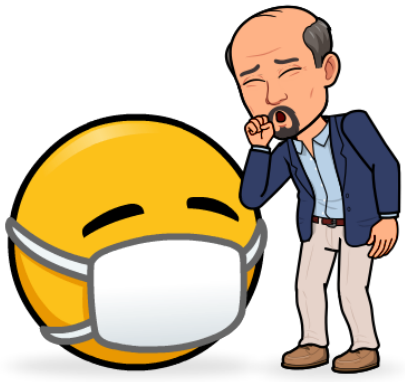
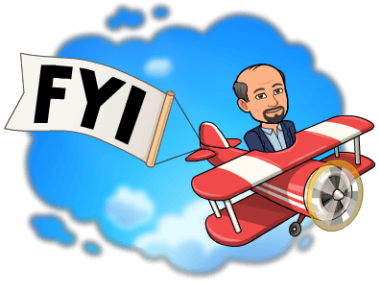





# About Jet Lag

Traveling across distant time zones leads to what is commonly known as 'jet lag.' This is a condition consisting a temporary loss of sleep, discomfort, and reduced efficiency that millions of travelers experience every year. While this is not associated with any serious illness in healthy people, the partial disruption of major body functions after many flight hours may cause sleepiness and hunger at unusual times for variable periods. The alteration of our biological rhythm is generally accepted as the main cause for the effects we observe. However, since jet-lagged travelers often complain that they could not rest at all, the lack of proper sleep may be one of the caused of reduced performance.

When we travel across different time zones, our body's normal circadian cycle is disturbed, and possibly altered temporarily. To most people, jet lag means experiencing a sense of fatigue, the inability to sleep at night, loosing concentration, or suffering from headaches and general tiredness.

According to PsychologyToday.com, the circadian rhythm *is the 24-hour cycle that tells our bodies when to sleep, rise, and eat, and regulates many physiological processes. This internal body clock is affected by environmental cues, like sunlight and temperature, and determines whether one feels wide-awake and energized or tired and depleted at different times of the day.*

As we reach our destination, the new environment our body is immersed into influences the circadian cycle - e.g. day or night at a different time than usual. The body reacts by attempting to maintain the time cycle we left behind. According to Stokes and Kite (1997) two distinct phenomena associated with lack of synchrony occur, notably between the internal rhythms and the external environment, and among the various internal rhythms themselves.

The former lack of synchrony is primarily caused by the alteration of the the light/darkness cycle, the changes in environmental temperature, meal times, physical activity, and interaction with other people. The body has some problems in adjusting to the new stimuli because changes in the body core temperature are relatively slow as noted by Reilly (1998). Around 3am to 5am in the morning, i.e. when its temperature is lowest, the body desires sleep. Based on a study by Robson (2008), some of the body rhythms re-synchronize automatically

in time at approximately one hour per day. So, if the place you have travelled to is 8 time zones away, your body will require 8 days to catch up with the local time. However, this is very subjective and not all persons may react in the same way.

The real cause of disrupted synchronization in the circadian cycle has not been discovered yet, but a study published in the year 2000 by the University of Virginia[1] points out that, in mammals, "*an organism is a conglomeration of oscillators. [...] When the primary oscillator in the brain shifts to follow an abrupt shift in the light cycle, the clocks controlling several other organs become desynchronized. It likely takes some time before these clocks adjust back to synchrony.*"

As far as returning to normalcy is concerned, some hormones like - but not limited to - Melatonin (the sleep regulator hormone) and Cortisol (the stress hormone) follow the natural circadian cycle. As such, they have a role, indeed not a marginal one, in keeping the body's internal clock synchronized, according to a study by Arendt, Aldhous & Marks (1986). I don't want to give too much space to biology here; suffice it to say that **Cortisol** is a steroid hormone produced in the adrenal glands to regulate blood pressure and control cardiovascular functions. The more the stress onto the body, the more cortisol is produced. This translates into higher blood sugar levels that are kept as a source of energy for possible physical or mental engagement. Cortisol secretion is higher in the morning and lower during the night.

## HINT

Biological rhythms are not to be confused with the discredited, so-called biorhythms of a 23-day physical cycle, a 28-day emotional cycle, and a 33-day intellectual cycle, which have given rise to calculators to pinpoint propitious or un-propitious days, according to an individual's date of birth.

[1] University Of Virginia. "Biological Clocks Become Desynchronized Under Jet-Lag Conditions." ScienceDaily. ScienceDaily, 28 April 2000.

# Melatonin: One size fits all... or maybe not?

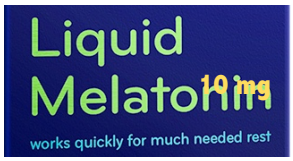
Hexa Research has published a study stating that the US online dietary supplements market is expected to be valued at USD 12.5 billion by 2025. Since it includes Melatonin, I have decided to dedicate a separate paragraph to it.

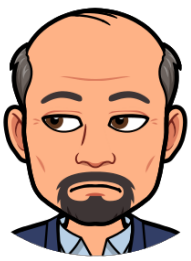
**Melatonin** is a hormone that influences our desire to sleep. It is produced by the pineal gland during the night. Exposure to day light slows down the production of Melatonin. On the opposite, darkness activates it. Numerous recent studies, including Buscemi, et al. (2004) suggest that the production of Melatonin influences body temperature regulation and helps to fall asleep.

Several supplements are sold on pharmacy shelves that promise to help you recover lost sleep or boost your energy. Among those are the supplements containing melatonin, which researchers largely accept as an effective solution to re-synchronize the clock in your body and get over jet lag.

Over the counter bottles in pharmacy stores are available in 1, 3, 5, and 10 mg (that's milligrams) capsules in most of the US. On the other side of the big pond, the European Food Safety Agency (EFSA) has published a study about the 'dosage of melatonin for positive physiological effects' as being different from the dosage authorized for medical use. Based on EFSA's Scientific assessments melatonin is physiologically active at levels as low as 0.5 mg per day 'to alleviate the effects of jet lag' and 1 mg per day for 'the reduction of the time required to get to sleep'. Further information and a scientific opinion can be found in this document.

Not surprisingly, Italy - the country in the EU with perhaps the strictest regulations on drugs - has reduced the maximum approved levels of melatonin in supplements from 5 mg to 1 mg per day since 2013 on the basis of EFSA's health claim.



# The Physical and Physiological Effects of Jet Lag

Every individual has a different reaction to the lack of synchronization in the circadian cycle. That is what makes reactions unpredictable. According to Colwell (1998), disruption of sleep, alterations in the gastrointestinal functions, reduced vigilance, diminished arousal, and lack of energy are among the most common symptoms of jet lag. Long haul travels often cause drowsiness and coldness during daylight flying, as the travelers' body clocks try to tell them it is time to sleep. Neri et al. (2002) have observed that the cognitive effects of de-synchronization may include reduced performance, altered mood, reduced motivation, and irritable behavior. Anxiety, irritability and depression, defective memory, longer reaction times, precision errors have also been observed.

In general terms, symptoms may become more severe 2 or 3 days after arrival rather than on the day after and fade as the various cycles of the body synchronize again. Another issue is the direction of travel, which affects the severity of jet lag. It is usually easier to recover from a flight westward than eastward, as the circadian rhythm is less disrupted in the former case.

As observed by Weinberg, Jantzen, & Cheyne (1998), "*the normal circadian cycle is temporarily lengthened while traveling westward and body rhythms extend in line with the normal tendency of the circadian rhythm, which is longer than 24 hours.*" On the other hand, eastwards travel results in a compression of the normal circadian cycle and therefore in a conflict with the natural cycle, that is longer than 24 hours.

As I read papers to write this short e-book, I wondered whether factors other than physiological can influence the severity of jet lag effects. As a matter of fact, there are plenty, of which many have to do with our routines and behavior.

Stress and fatigue due to our work patterns and duties until before departure combined with the physiological aspects of flying may worsen the symptoms. People over 40 years of age usually suffer the effects of jet lag more since the levels of natural melatonin dip with age. As far as lifestyle is concerned, people who exercise regularly tend to suffer less than those who have a more sedentary routine.

Most people have few problems enduring the effects of an occasional case of jet lag; however, repeated bouts can increase overall levels of fatigue as the effects of continual circadian disruption are cumulative. Repetitive sleep disruption, combined with confused body cycles and environmental stress associated with air travel leads to a situation where chronic performance and health issues become inevitable. While fatigue and stress are regarded as separate issues to circadian de-synchronization they are intrinsically interdependent.

# Interpreting-related Jet Lag Issues (and how to cope with them)

Some professions require sharp focus on both the main picture and minute details, strong short-term *and* long-term memory, and the ability to decide well and quickly. Interpreters in some special sectors - namely medical, legal, military - are not different from, say, doctors, soldiers, air traffic controllers. A small distraction can really change the life of people, sometimes forever. This is why, as interpreters, we are responsible to carry out our assignments responsibly and demand proper rest time is ensured before and between assignments that require a time zone change.

We can have exacting clients, or demanding assignments, or both. Here's a list of suggestions you may choose to adopt to deal with awkward situations.

## Contracting your Rest

When your client proposes a wonderful 4-day assignment to Europe, you start to get excited. A wonderful opportunity to visit the Old Continent, its history and traditions. And the food...delicious!

Or may be the other way round. Four days in New York. Yes, it's a 6-hour workday, but eventually you will enjoy the Big Apple for sure!

In both cases, there is a big downside. When you travel East, you will most probably take off in the evening, sleep aboard, and land early in the morning in Europe. When traveling West, takeoff is in the morning and landing in the afternoon.

Then you get the agenda of the meeting in Lisbon and realize it starts at 14.30 and ends at 10 pm with the official dinner. Or you see that your client's client is hosting a dinner between 7 to 9 pm in Manhattan, which for you will be 1 to 2 am in the morning!

So this is the first of my suggestions. Your timetable for travel should allow you to enjoy sufficient rest, so that you can provide the best quality. If the client insists on traveling together, be sure you clarify that quality may be undermined if travel and work have been scheduled the same day. Leaving one

day before on your own and adding one night in a comfy but low-cost hotel to the bill will definitely not ruin him.

Second, be sure your contract includes the same traveling arrangements for you and the rest of the delegation/team you work for. Indeed, double standards are something I hate, but not uncommon nowadays. I will definitely write a post on this soon.

Third, do not forget to include pay for non-working days, such as days of travel. My good friend and excellent colleague Tony Rosado (LinkedIn profile) has dedicated a specific post to contracts for interpreters. This is what he says about travel conditions:

*Travel expenses must be included in the contract. The document should clearly state what expenses are reimbursable: airfare, hotel, ground transportation, Per Diem, photocopies, etc. It should also spell the fees payable to the interpreter on traveling days. Remember, you provide a personal professional service. You cannot provide your services to two clients at the same time, so on the days that you travel to and from the assignment location, you are not working for any client. Unless you like to lose money, you should clearly negotiate and include in the contract your travel fee. There is a cost of doing business, but you should never lose money for accepting an assignment. Maybe one half of your regular fee should be a fair compensation for your travel days. Make sure that reimbursement of expenses for travel days are for total expenses. You can charge a lower fee, but you cannot fly, sleep or eat for less money just because it is a travel day.*

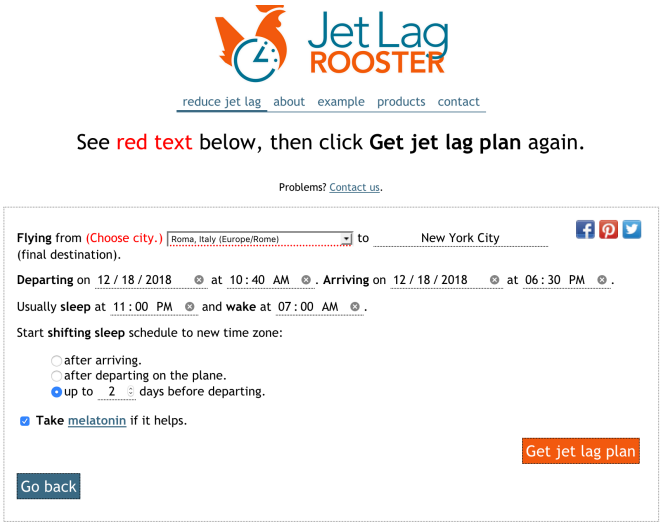
## Before you fly

The effects of jet lag can be easily counteracted by keeping the sleeping-wake schedule as close to the same as the home time zone as possible, since it is the timing of sleep, not necessarily the amount of sleep that is of most importance.

You may want to start adjusting your routine times before you leave. For example, if you are planning to fly eastward from NYC to Western Europe, try shifting bedtime and rising time forward by an hour or two over the course of several days prior to departure. If you're flying westward, you may want to try delaying bedtime and rising time. If are new to this, or need a better and yet rigorous planning, why do not pay a visit to a website called Jet Lag Rooster, where you can create an individual plan suggesting the best times for bright light

exposure (e.g., sunlight) and melatonin. In doing so, research has shown people tend to suffer jet lag effects less (Lieberman, 2003) or even prevent jet lag completely (Burgess et al., 2003).

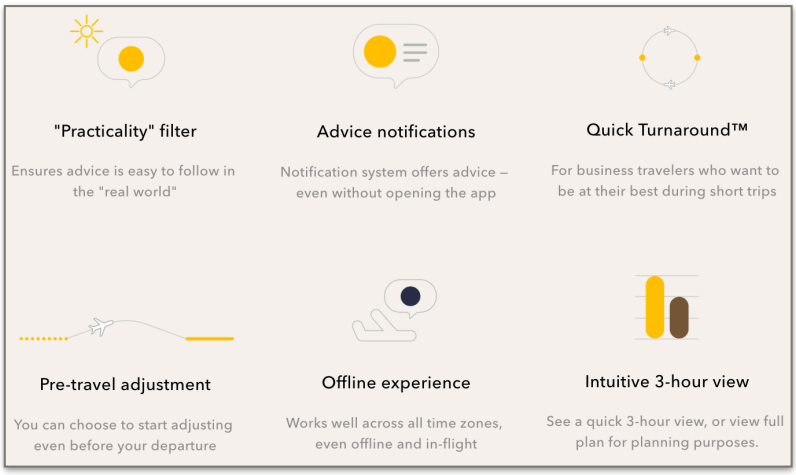
Just input the details of your travel (departure/arrival city and time) and let the algorithm do the rest. Here's some screenshots for a Rome, Italy - New York City trip:




The Form to Input your Travel Details

For details on the science behind it, check out this article in Scientific American (Olson, 2013).

Another option is to buy an annual subscription for Time Shifter, an app available for both iOS and Android.




Timeshifter's main functions (taken from timeshifter.com)

According to its website, Time Shifter "adjusts advice to the 'real world' " by providing graphical indications on when to sleep, enjoy light, and avoid caffeine, among other things. I have not subscribed, but since the first trip plan is free, I think it is worth a try.

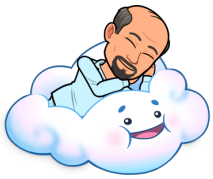

A sample schedule to Tokyo (from timeshifter.com)

Moreover, there is a number of steps you can take to avoid or reduce jet lag even before you leave. The most common are listed below.

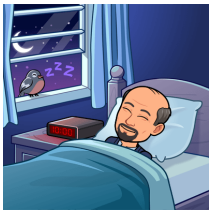
## *1. Take a break from your rigid schedule*

If you are used to having a rigid schedule at home, or simply you feel more comfortable with it, try to loosen some constraints in the days before you fly out. Having a flexible routine for meals and rest will make it easier to adjust to new time zones..

## *2. Sleep enough before you fly*



People often sleep for just a few hours before a long flight. That's a big mistake, huge. Your body needs time to adjust to a new routine and last minute changes won't help adjusting to a new time zone. A good night's sleep before your flight will give you the strength and energy to cope with jet lag when needed.



### *3. Do your best not to arrive at night*

If possible, plan to arrive during the day. It will be easier for you to stay awake, get out and explore if the sun is up in the sky and there is still part of the day ahead of you. Eventually, why are you traveling somewhere just to go to sleep?


### *4. Know Thy Plane*

More recent aircraft, such as Airbus' A350s and A380s, are among of the best planes: they feature hi-tech humidification systems that help increase air moisture and avoid dryness in mucosae; LED lighting systems that simulate the natural light change observed in the natural phases of the day; and air purification systems which renew the air inside the cabin every few minutes.

## During the flight

### *5. Avoid alcohol*

I know a Bloody Mary may be tempting before takeoff, but alcohol at altitude increases the sense of tiredness and normally causes dehydration, which in turn is a great obstacle to overcoming jet lag quickly.


### *6. Say a big no to sleeping pills*

Many people think that a sleeping pill will help them better cope with long-haul flights. In general terms, this is a bad idea. They do not facilitate recovery from jet lag and just leave you fuzzy after landing. Ask for tea or camomile instead, and you will peacefully fall asleep for good, and in a natural way.

### *7. Thou shalt know caffeine is thy enemy*

All beverages containing caffeine, not just coffee itself, should be avoided. So keep your appetite for cola and energy drinks away, at least before your flight. Caffeine, taurine, and other artificial stimulants do affect your ability to sleep. As a result, your jet lag recovery time will invariably be longer. If you are thirsty, just ask for water. I know it is not as funny as a good and chill cola, but it's healthier..

### *8. Your seat...well, it's just a seat*

You may have noticed people on long haul flights who tend to become one with their seats from the moment they get onboard to the moment they disembark. Moving around regularly and doing exercises to avoid stasis is important. Most of carriers on long-haul flights created leaflets to explain what exercises are best for your shoulders, neck, and legs. I normally bring graduated compression socks with me to facilitate circulation, but moving around is essential.

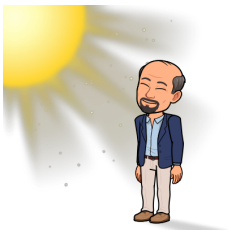
For more information on graduated compression and Deep Vein Thrombosis (or DVT), I suggest to read this article on WebMD.

## After the Flight

### *9. Aren't you hungry?*


Hunger is a common feeling as people disembark after a long flight. One temptation to resist is to eat anything that comes into range or stop at the first restaurant or diner. A healthy food regime is the best to cope with jet lag, since our body will get the nutrients it needs.

### *10. Bask in the sun*



Get as much daylight as you can. Light generates different effects on the body clock at different times of day. Receiving light at the appropriate time of day will shift the body clock in the correct direction and shorten jet lag effects. There is actually a light therapy you can adopt before, during, and after your flight. Find more information in this post.

### *11. Get some exercise*

Exercise increases heart rate and respiration. As a result, your body will respond accordingly: endorphins will be released and this can have a direct effect on the duration of your jet lag symptoms.

A study from Japan has focused on flight attendants traveling from Tokyo to Los Angeles (an eight-hour time difference). The researchers concluded that outdoor exercise resulted in 25% reduction of jet lag recovery time, i.e. from four days to three.

# Conclusions

Jet lag is a serious issue, especially for professional interpreters who are required to deliver high performance from the onset. A court hearing, a medical consultation, or a diplomatic meeting leave #terps little time to warm up or adjust to the environment. Bewilderment due to lack of sleep, or de-synchronization of our body's internal clocks is something interpreters should take very seriously, and so the clients.

The silver lining is that much of the jet lag-induced effects can be contained or avoided. However, while it is useful that interpreters and participants to a meeting have a clear understanding of what the effects of jet lag can be, clients should be informed too.

Talking to your client and taking time to explain these effects is indeed important. As soon as they realize their interpreter(s) are knowledgeable about these issues, good clients will also take some time to listen and agree that a few simple steps taken in the correct order can in fact remove the disturbing factors and improve the interpreters' alertness, sharpness of mind, and concentration. This would translate (pun intended) into a better performance and a successful meeting.

Just be clear, explain things the client cannot know and create the conditions for the smoothest experience possible. This will reflect credit on you and your client will notice you and him/her have created value together.

In a co-creation model, clients are involved throughout the process, as interpreters and users of interpreting services are all stakeholders. What is more, real-time feedback received during service tailoring reduces misunderstandings, benefits the service, the end users, the client's organization and, ultimately, the bottom line.

Always remember that **interpreting is a team effort**, not just between interpreters in and out of the booth, but also between the interpreters and the client. I cannot imagine one of these two parties having any goal but meeting success. So, why don't work together to achieve it?

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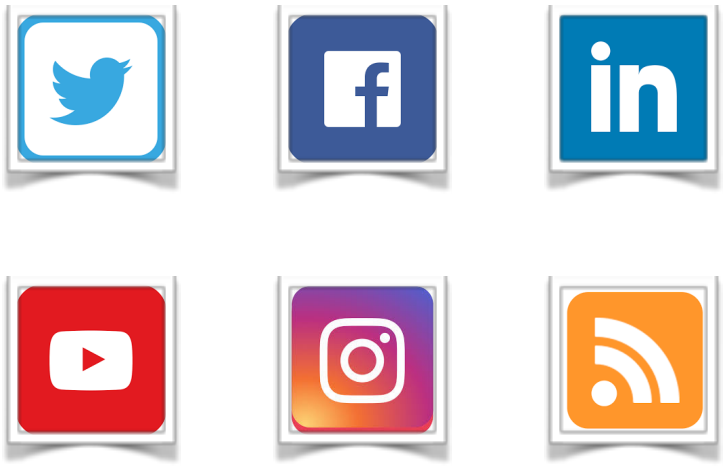

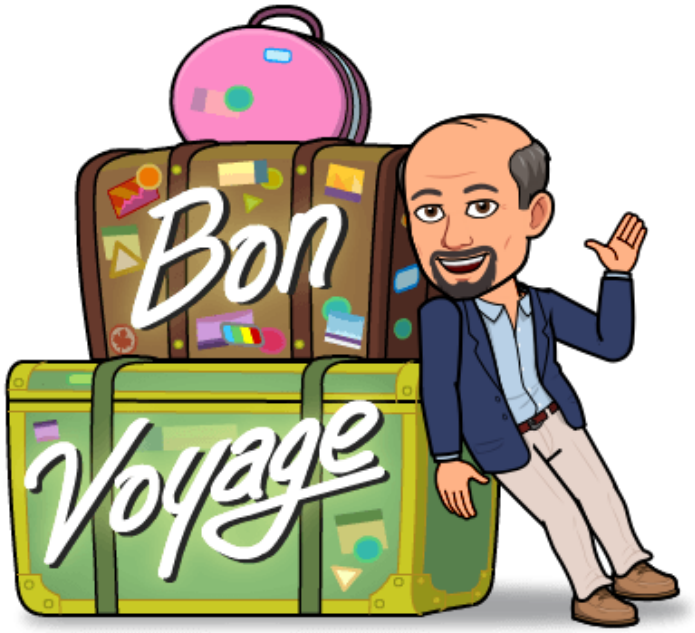

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# About the author

**Paolo Cappelli (@interpreterpaul)** is a conference interpreter with 20+ years of experience based in Rome, Italy who often travels to the US. He graduated in Conference Interpreting and in Journalism, and holds a MBA Degree from St.John's University, NY. While his passions span from international business to communication, he loves to focus on strategy and advice to companies and interpreters/translators to improve their performance in an international setting.

His main fields of work include diplomacy, public policy, military issues, and technology. Paolo has worked for several public and private clients including - *inter alia* - the President of the United States, the President of the Italian Republic, the US Embassy in Rome, and SKY news.

Paolo is very active on social media, manages his own blog and is the editor of a wide-encompassing e-zine, The Interpreting and Translation Herald, which is published three times a week.

# Common hashtags in my e-books

**#1nt** for interpreting

**#xl8** for translation

**#terps** for interpreters

**#mil1nt** for military interpreting

**#r1nt** and **#RSI** for remote (simultaneous) interpreting

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