



UNDERSTANDING PARKINSON'S AND THE POWER OF INTENT

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THANK YOU TO MY WONDERFUL
STAFF FOR HELPING TO PREPARE THIS
PRESENTATION!



What is Parkinson's?

intentional

in · ten · tion · al

Adjective: Done on purpose; deliberate.



TOOLS FOR MANAGING PARKINSON'S

- Medications
- Exercise
- Compensatory strategies

Alice R.

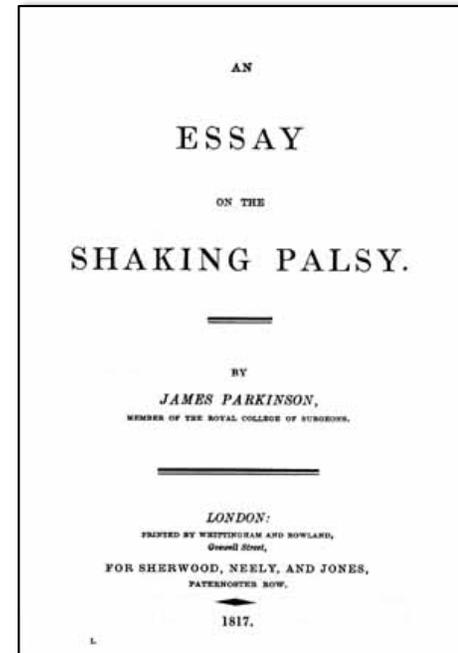
Before and After Treatment

Video

[Click here](#) to watch.

DR. JAMES PARKINSON (1755 - 1824)

- 1817
- English physician
- First to medically describe the condition
- *An Essay On The Shaking Palsy*



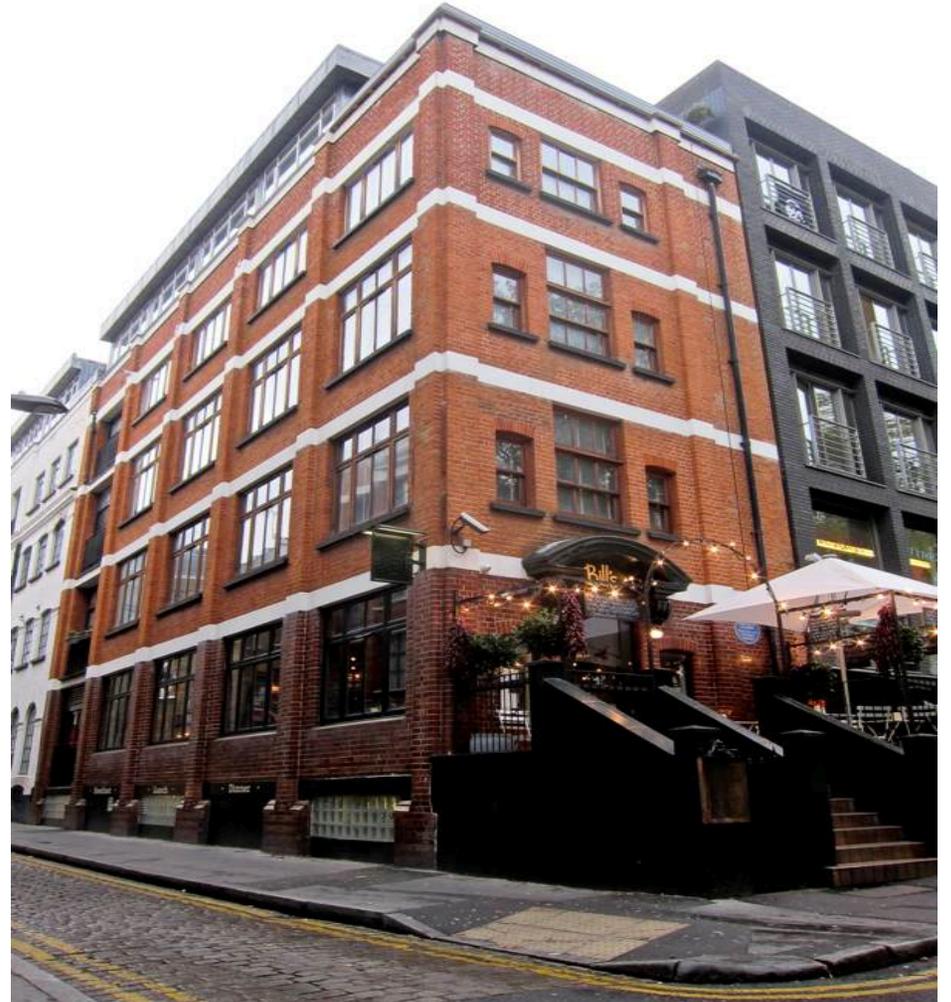
“So slight and nearly imperceptible are the first inroads of this malady, and so extremely slow is its progress, that it rarely happens, that the patient can form any recollection of the precise period of its commencement.”

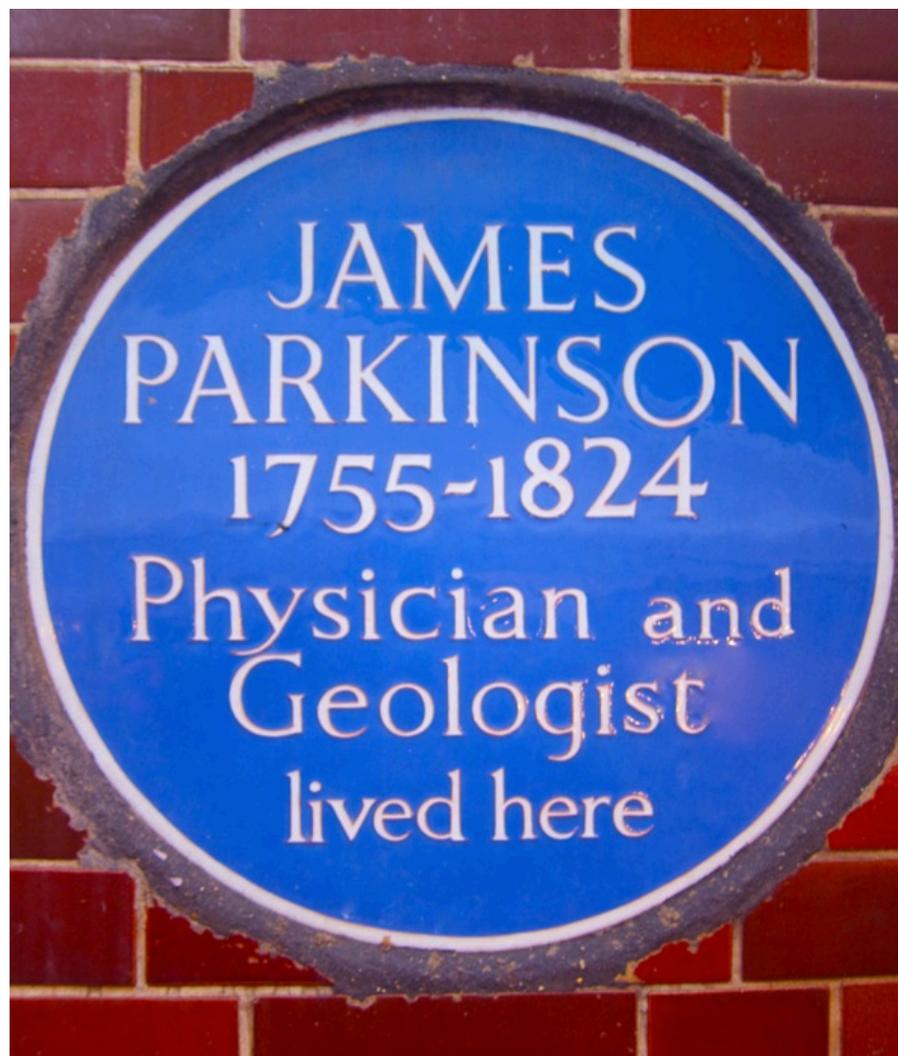
- *James Parkinson*
Essay on the Shaking Palsy



well, i ALWAYS WANTED TO BE ONE
OF THE MOVERS AND SHAKERS -- i'VE BEEN
DIAGNOSED WITH PARKINSON'S

CartoonStock.com





CASE I

- 50-year-old male
- Gardener
- Slight tremor of his left hand and arm
- Overexertion

CASE II

- 62-year-old male
- Attendant in a judge's office
- Symptoms for 8-10 years
- All extremities affected
- "Interrupted speech"
- "Bowed body"
- Walked on forefront of feet
- Used stick to walk

CASE III

- 65-year-old male
- Sailor
 - Head thrown forward, seeming to “force him to run”
 - Used stick every 5-6 steps
 - “Bowed body”
- Athletic frame
- Unable to walk

CASE IV

- 55-year-old male
- Experienced symptoms for five years
- Trembled on one side of the body

CASE V

- Observed from a distance
- Attendant balanced him by the shoulders; would rock him backward and forward to gain balance
- Ran 20 steps and then regained balance again

CASE VI

- 72-year-old male
- Hands trembled 8-10 years prior and then stopped
- Three years ago, right hand started trembling
- Progressed to whole body
- Speech affected
- Man attributed issues to age and lower back pain he experienced 20 years prior

DR. JEAN-MARTIN CHARCOT (1825-1893)

- French neurologist
- “Father of Modern Neurology”
- Refined Parkinson’s earlier description
- Distinguished Parkinson’s from multiple sclerosis and other disorders



DR. JEAN-MARTIN CHARCOT (1825-1893)

- Suggested name change: Parkinson's Disease
- Not all patients have a tremor
- Parkinson's patients are not markedly weak

Parkinson's is characterized by
smaller movements...

Smaller walking
Smaller writing
Smaller voice

Muscles become weak because they're not used to their full capacity, not because Parkinson's is making them weak.

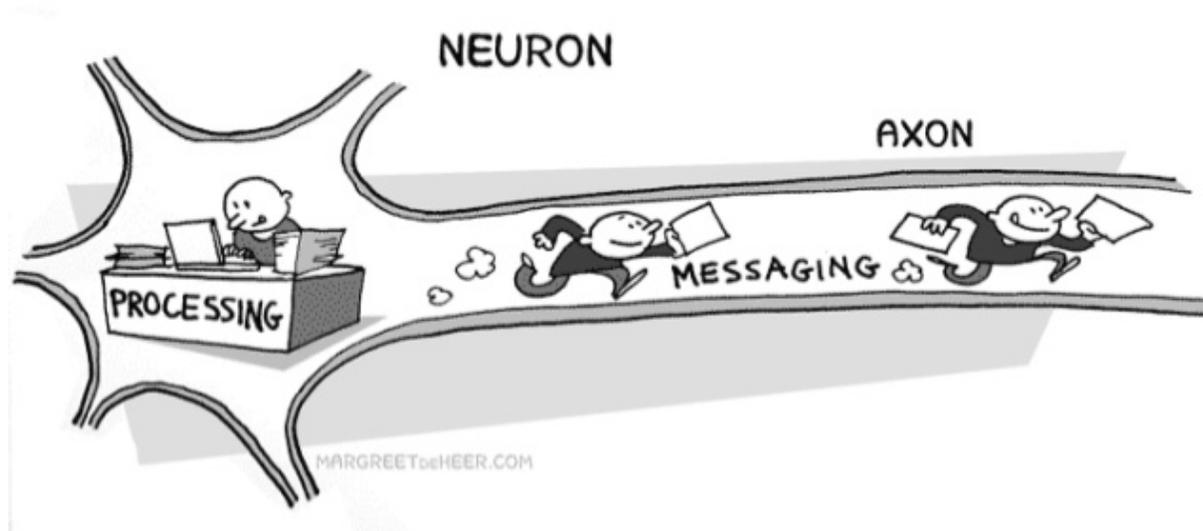
WHAT CAUSES PARKINSON'S SYMPTOMS?

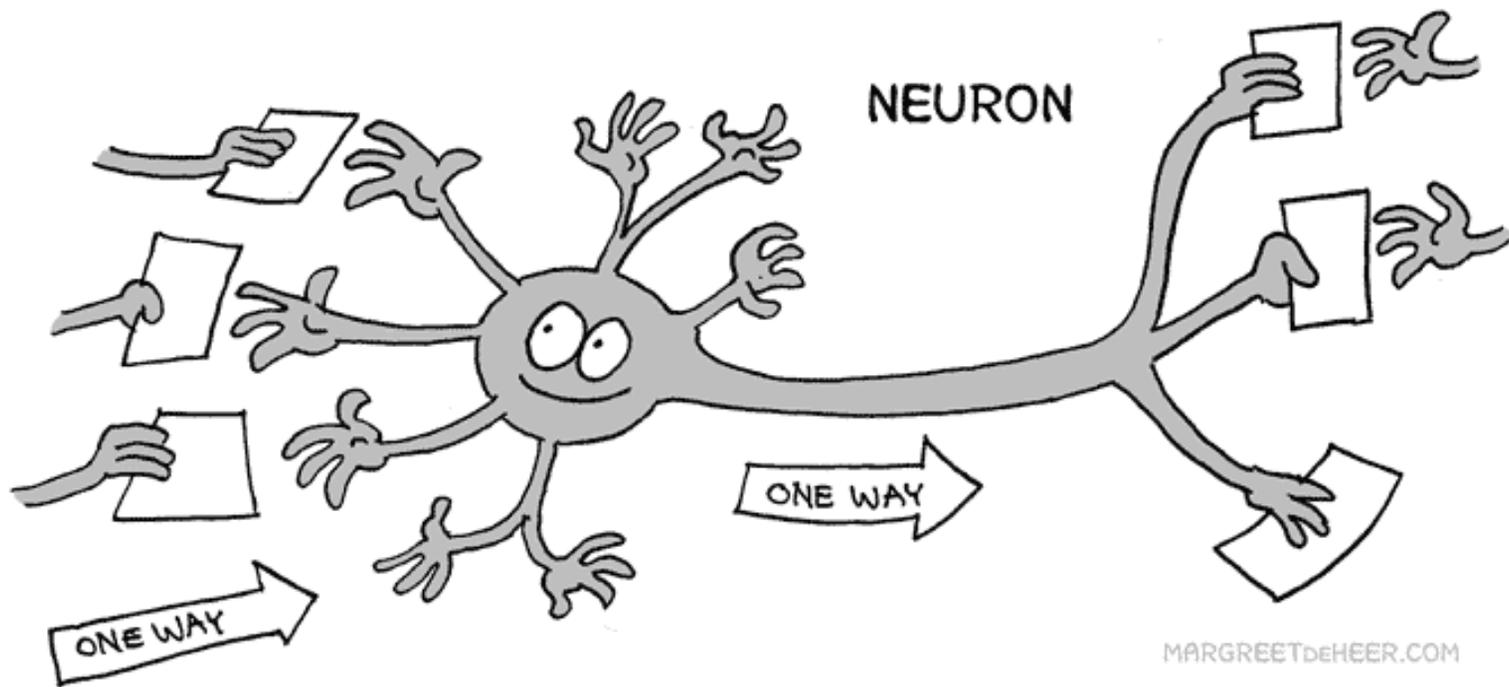
- Neurons that produce a chemical called **dopamine** die or become impaired
- Approx. 80% of dopamine-producing cells are lost by the time motor symptoms appear



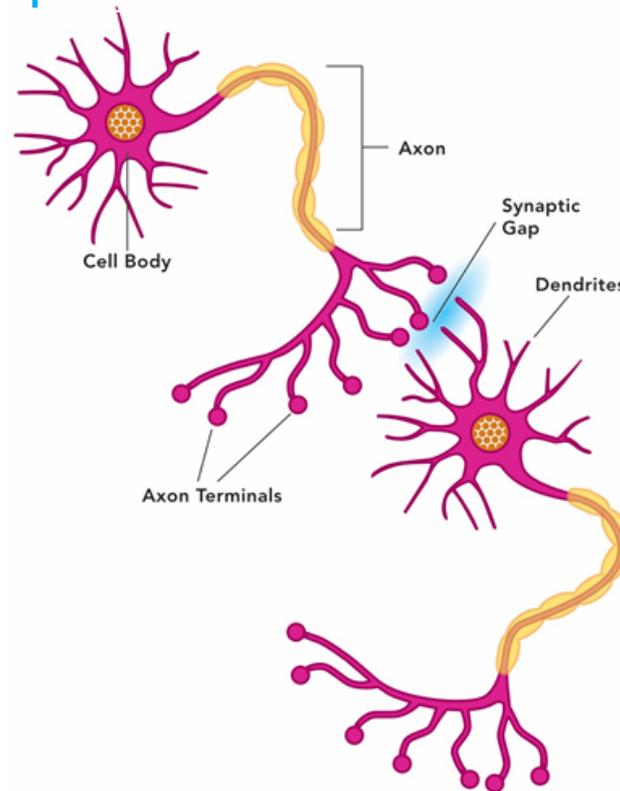
DOPAMINE IS A CHEMICAL MESSENGER

that transmits information from one neuron to the next for smooth and coordinated **AUTOMATIC** movements.

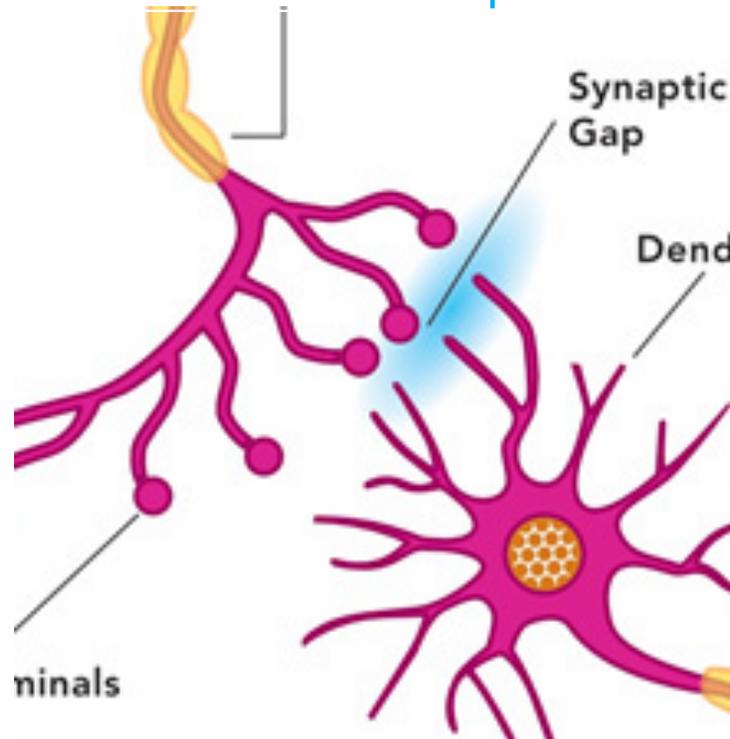




Information enters the cell body from the dendrites and runs along the axon, which fans out; the information is then passed to the next neuron.



There is a gap between neurons. Dopamine is released into the gap and acts like a “bridge” to help information get from one neuron to the next. This is why dopamine is called a “neurotransmitter.” Since at least 80% of dopamine has already been lost, automatic movements are impaired.

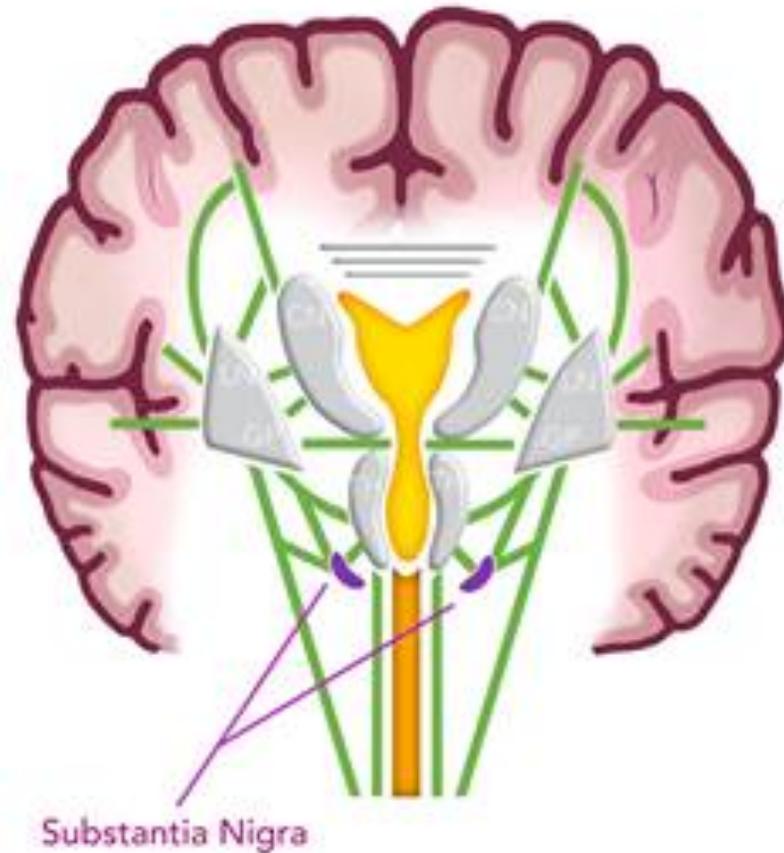


AUTOMATIC SYSTEM

“Extrapyramidal System”

Information travels from the cortex to the brainstem and spinal cord. Impulses travel from one structure to the next, including the substantia nigra where dopamine is produced.

Since there's not enough dopamine, the “automatic system” doesn't work very well.



Without enough dopamine,
automatic movements are disrupted:

Walking, Talking, Swallowing, Blinking,
Swinging Arms while Walking,

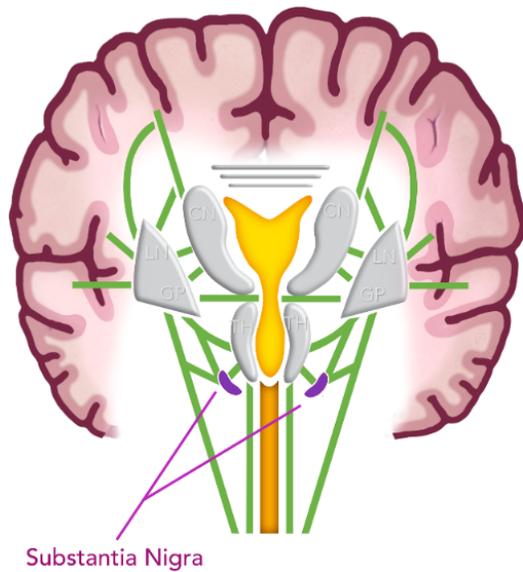
Getting Out of a Chair, Picking Up a Fork are things
we do automatically— without conscious effort.

Ready for some
good news?

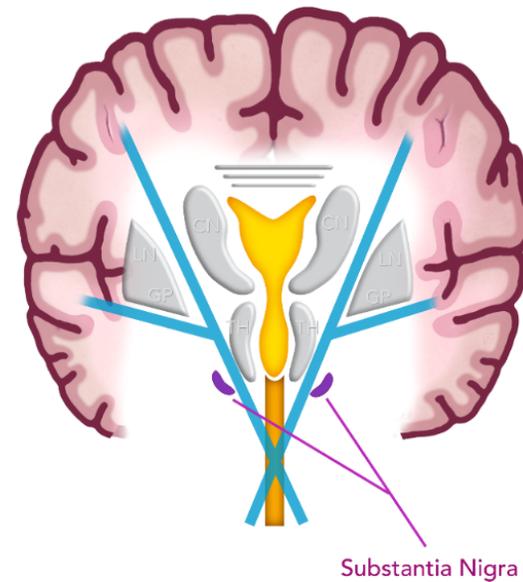


Humans Have Two Motor Systems!

Extrapyramidal System
Automatic System



Pyramidal System
Intentional System



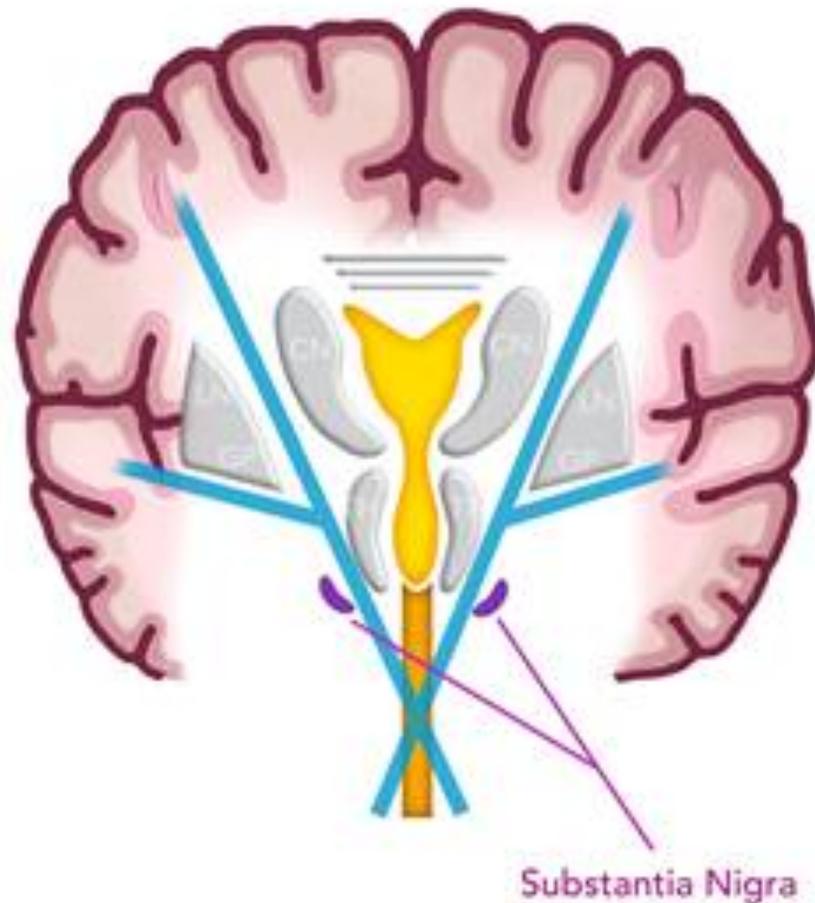
INTENTIONAL SYSTEM

“Pyramidal System”

Information travels from the cortex to the brainstem and spinal cord.

Impulses travel straight down.

They don't stop at various structures, like in the automatic system. The “intentional system” works well for people with Parkinson's.



Automatic Motor System
vs
Intentional Motor System
Video

[Click here](#) to watch.

WE ALREADY KNOW HOW TO USE INTENT!

- First job interview
- Driving down the freeway when it's raining
- Exercising
- Basketball, baseball, tennis
- Giving this presentation!

Automatic Speech vs Intentional Speech

Video

[Click here](#) to watch.

LET'S REVIEW

- Parkinson's **does not** make muscles weak.
- Parkinson's is characterized by **smaller movements**.
- Smaller movements = **weaker muscles**.
- People become weak because they're **not using their muscles** to their full capacity.

LET'S REVIEW

- People with Parkinson's do not have enough **dopamine**.
- Dopamine is responsible for **automatic** motor movements.
- Humans have **two motor systems**: automatic & intentional.
- **The intentional motor system works!**

LIVE LESS OUT
OF HABIT &
MORE OUT
OF INTENT.

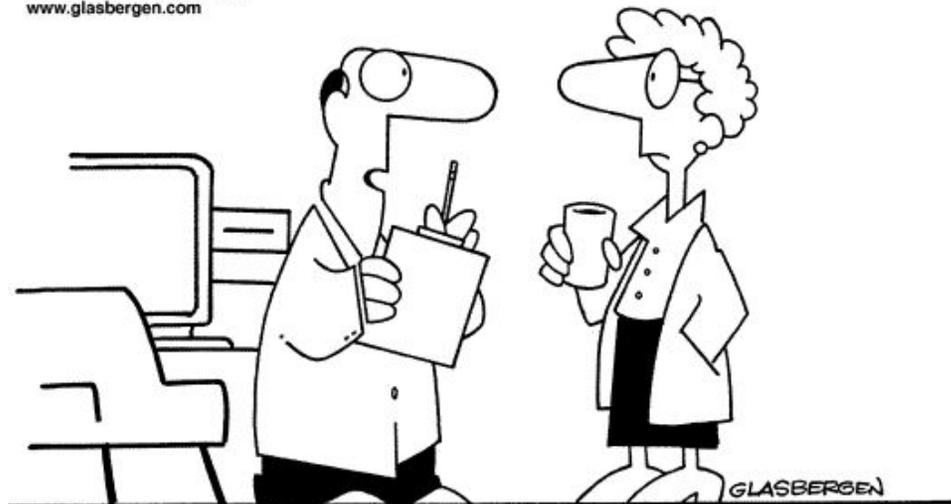
What does an intentional life with
Parkinson's look like?

Consider These Challenges

- Slower movements
- Smaller movements = weakness
- Slower processing speed
- Attention
- Multitasking
- Decision-making

STRESS EXACERBATES PARKINSON'S SYMPTOMS!

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www.glasbergen.com



“According to the latest research, the average human body is 20% water and 80% stress.”

Look for Solutions That Counteract the Challenges

Slower movements → Faster, easier, more efficient

Smaller movements = weakness → Increase strength

Slower processing speed → Requires less thought

Attention → Less distractions

Multitasking → Less steps

Decision-making → Less choices; less decisions

MANAGE YOUR MEDICATIONS

- Use just one pharmacy.
- Get to know your pharmacist.
- “Brown Bag Review” all your meds/supplements annually.
- Ask your doctor if you still need to be on all your meds.
- Find out how long it should take to notice effects.
- Ask about common side effects.
- Prepare meds 1-2 weeks at a time using organizers.
- Have at least two small “to go” organizers.
- Take medications as prescribed, and record any adjustments.

WHEN WE TESTED THIS
DRUG ON MICE, NOBODY
NOTICED ANY SIDE
EFFECTS.



PARKINSON'S MEDICATIONS

Sinemet (Carbidopa-Levodopa)

Stalevo

RYTARY

Duopa

Comtan

Selegiline

Rasagiline

Zadago (Safinamide)

Mirapex

Requip

Neupro

Apomorphine

Amantadine

Amantadine (Gocovri)

Help your doctor figure out the best combination for you by taking your medications as prescribed or writing down any adjustments you make!

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PHYSICAL THERAPY, OCCUPATIONAL THERAPY, AND SPEECH THERAPY Need To Be A Part Of Your Everyday Life!

- Find a therapy clinic that specializes in Parkinson's treatment.
- Engage in **one-on-one therapy** that includes daily home exercises.
- Exercises should focus on **INTENT** – using increased effort to make movements bigger, exaggerated, and more powerful.
- Therapists should **challenge** you—not feel sorry for you!
- Continue exercises **daily** after completing formal therapy.
- Have a **re-evaluation** at least every six months for PT, OT, ST.
- Continue this regimen for the rest of your life!

IDEAL TREATMENT MODEL FOR ALL THERAPIES

Never let your strength decline more than 6-months. Have a re-evaluation of all three therapies at least every six months to get back to your “graduation levels.”



Tossing and turning
at Night should
be counted as
exercise.



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PREPARE THE NIGHT BEFORE

- Review your schedule for the next day.
- Prepare a daily “notecard” with just that day’s schedule.
- Set out your clothes for exercise and the rest of the day.
- Prepare your medications that you need to take with you.
- Get your keys, wallet, and purse ready.
- Prepare snacks and a water bottle.

Look for Solutions That Counteract the Challenges

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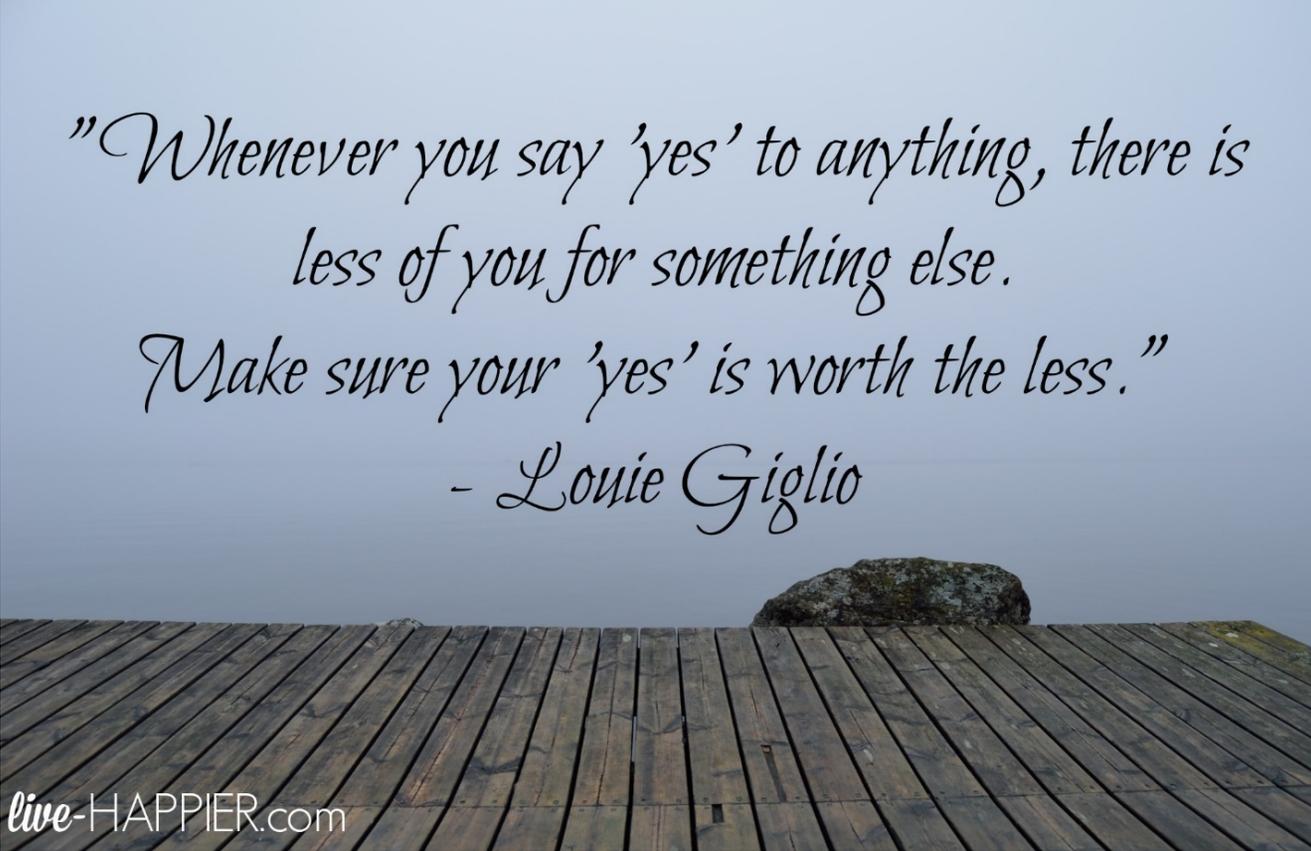
DE-CLUTTER YOUR LIFE

- De-clutter your home – give away items that you haven't used in years or that don't have value or meaning to you.
- Put things where they belong.
- Recognize stressful relationships and manage them.
- Learn to say, “no.”
- Turn off cell phone alerts and alarms.
- Unsubscribe from emails and subscriptions you don't want.
- Have two emails – one for family and friends and important communication; a second email for online orders.



**“Organized people are just people who
are too lazy to look for things!”**

GLASBERGEN



*"Whenever you say 'yes' to anything, there is
less of you for something else.
Make sure your 'yes' is worth the less."
- Louie Giglio*

*live-*HAPPIER.com

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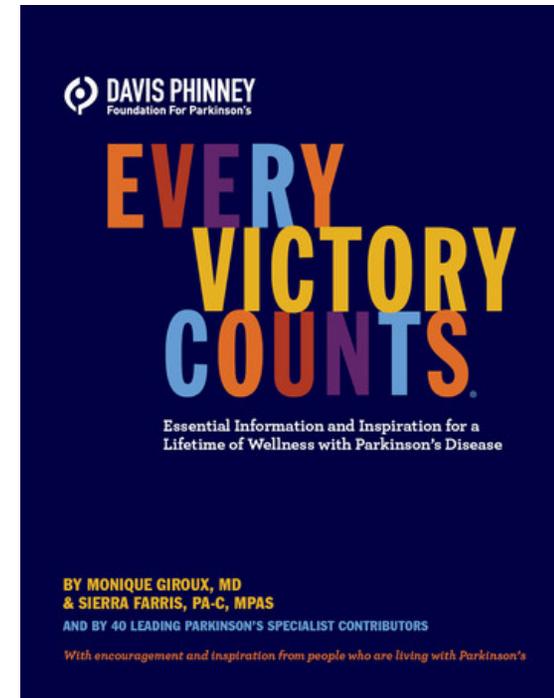
Attention → Less distractions

Multitasking → Less steps

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BE INFORMED
Avoid negative websites.

Davis Phinney Foundation's
“Every Victory Counts” Manual



Watch this Video on Parkinson Voice Project's Home Page and Download our "Step By Step Plan for Living with INTENT!"



www.ParkinsonVoiceProject.org

THE LOUD CROWD'S

Step **by** Step Plan for Living with **INTENT**

Intent: (noun) /in-tént/ to be focused, purposeful, and deliberate

Managing Parkinson's can feel like a full-time job. Although there are many helpful tips and resources available that can improve one's quality of life, it can be overwhelming to organize the steps necessary to manage Parkinson's.

While this step-by-step plan is not all-inclusive, these are suggestions from Parkinson Voice Project's LOUD Crowd® members.

Topics *(click to view page)*:

- Seek the Best Medical Care Possible
- Manage Your Medications
- Exercise Your Body, Voice, and Mind
- Improve Your Communication in Social Settings
- Promote Good Sleeping Habits
- Reduce Your Stress
- Reduce Your Risk for Falls

Dopamine is responsible for our motivation and drive.

Without enough dopamine, people with Parkinson's may not be motivated to engage in exercise and activities that could help them. Assistance from family, friends, and support groups can help.



**"The last thing I remember is being
thrown into the dryer."**

Elinore B.
“Living with INTENT”
Video

[Click here](#) to watch.

Questions?





PARKINSON VOICE PROJECT

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