The General Theory of Behaviour

The General Theory of Behaviour:

A Sourcebook

Edited by

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For four adorable grandchildren, Jethro, Micah, Plum and Roman.

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PREFACE

"He grew up being curious
And thinking things are various.
Nothing was merely deleterious
Or spurious..."
—Gwendolyn Brooks

A warm welcome to *The General Theory of Behaviour: A Sourcebook*. Today it is customary to say one is 'excited' to present something new, and – in this case – I truly am.

This is the story of a new Psychology, a new approach to the science of mind and behaviour. I introduce the theory in Part One. Part Two reveals some astonishing new findings that were predicted from the theory. In Part Three, I review progress and prospects.

This Psychology adventure required a leap of imagination. Without it, the theory would not have happened. I begin with a story of a schoolyard incident that remains etched into my memory.

As a 15-year-old I attended grammar school in the city of Portsmouth, England. On the last day before a mid-term break, the following incident happened.

Everyone was wearing the compulsory school uniform, yet subtle differences in appearance set us apart. I belonged to a teenager trend known as the "Mods", marked by our neat hairstyles, tie knots, and in-group companions.[1]

That Friday morning, during break, a group of four "Teddy Boys"[2] *had their eyes fixed on me. Their leer was impossible to ignore. I averted my gaze, turned my back and continued chit-chatting with my friends. Then, out of nowhere, a tap landed on my shoulder.*

I barely had time to react before it hit. Sid, with his slicked back, Tony Curtis hairstyle, delivered a sharp head-butt to my face. The infamous "Liverpool

[1] https://en.wikipedia.org/wiki/Mod_(subculture)
[2] https://en.wikipedia.org/wiki/Teddy_Boys

kiss", which was how a few lost individuals transacted business, a simple, brutal "kiss". Before I could process what had happened, the bell rang and, like prisoners in an exercise yard, we trudged back to class.

Sid's attack had been precisely calculated to leave no time for a counter-response. He'd made his move and slid back into the crowd, half-boy, half-man, already a proven coward.

Sent home early for the holidays, I spent nine long days stewing over the surreal normality of it all. A sting of humiliation blended with a growing resolve. By the time I returned to school, there could be only one course of action.

Monday morning break arrived, and I invited Sid for a return "tête-à-tête" behind the bicycle sheds. Sid had no option but to accept. Word spread fast, and within minutes, a crowd of twenty or thirty had gathered, forming a ring around us. The spectators began their ritualistic chant: "Fight! Fight! Fight!" Their voices rose, fueling the tension in the air.

"C'mon, Marko! Do 'im over!" someone yelled.

Fueled by adrenaline and indignation, I unleashed a flurry of punches. Sid went down, but I did not stop. The crowd roared louder with each blow. Time blurred. Half a minute flew past—it felt much longer—and the stocky figure of the Deputy Head stormed onto the scene. "Enough! Enough!" he bellowed, dragging me away. He'd intervened just late enough for me to emerge victorious. Sid had been well and truly "done over" and the message was clear.

Why this story? Not to condone physical violence, of course, because I am absolutely against it. In this instance, the unwritten schoolyard rules had made the choice between fighting, fleeing or doing nothing a no brainer – I had been left no option but to nip the situation in the bud. I had been bullied, and this could not go unchecked. The necessary rebalancing had proved decisive:

(1) My friends and I would never hear another peep out of Sid's gang. There could be little doubt, had I not responded, Sid's gang would have done it again.

(2) This would be the last time I ever engaged in physical violence.

(3) I had learned about perpetrator-victim reversal.

(4) Above all else, I had learned the 'Principle of Reset' – the subject of this book.

Perpetual curiosity about behavior draws one to constantly ask questions, delve for answers, and – hopefully – once in a while, uncover new truths. Yet, one's search raises profoundly difficult, unanswerable questions, such as: Is there life after death? Does God exist? What is consciousness? Why does chocolate taste so good? If we are not to behave like the legendary ostrich, we must continue to search whatever barriers may lie in our path. Difficult questions may even, on occasion, yield simple answers.

There are limits to knowledge, yet we feel compelled to unpick our direct sensory experiences, especially the indelible ones. Our anchors in time and space fix who we are in ways that cannot be undone. For example, my birth year – 1945 – contains the hollow glow of the allies' WWII "victory," overshadowed by the ravages of the war itself and its all too obvious impacts on one's parents. Two great tragedies of that year were irreversibly formative: the discovery of the Holocaust and the dawn of nuclear annihilation. After the mists of childhood lifted, these legacies sharpened to live within all we '1945ers'. Finalizing this book eighty years later coincided with International Holocaust Remembrance Day (January 27) with Hiroshima Day (August 6) marking the other great "Reset". Narratives of wars, oppression, poverty, climate change, fires and floods compete for attention. The relentless spew informs not only that all is not well, but that something terrible is just around the next corner for our planet Justifiably, we fear for the future of our grandchildren. Brimming with concerns and questions – complex, unsettling, and unavoidable – the chief of which must be: Why – and how – do so many atrocities happen?

Born too late to face the ravages directly, we "war babies" lived through a dose of devastation nevertheless, not only physical, but psychological. The bombs had killed or injured over 3,000 civilians in my home city, destroyed or damaged buildings and broken water mains, gas pipes, sewers, electricity cables and telephone lines.[3] One's childhood was gainfully spent playing on bombsites or on car-less streets of blitz-scarred Portsmouth. These sites had become overgrown with greenery and small trees. My brother Jon and I built dens, looked for bird nests, butterflies and chrysalises, which we learned to "hatch" in the airing cupboard. What a marvel! Playing conkers, marbles, hopscotch, or kicking a ball around, we learned about the "birds

[3] Total UK casualties in WW2, 450,900.
https://en.wikipedia.org/wiki/United_Kingdom_casualties_of_war

and the bees". One highlight: going to Fratton Park on Saturday afternoons with our father to see Pompey play.

Figure P-1. The damage that a single high explosive bomb could cause: in this case, at Dunbar Road, Portsmouth, on 19 August 1942. (Public domain: *Portsmouth Libraries and Archive Service, 2025).*

In the home of the British navy – with 572 pubs and beer houses – one marveled at the vast fleets entering port, and the antics of thousands of onshore, mainly drunken sailors; US, Russian or French, it made no difference. My friends and I started a youth club and joined the Campaign for Nuclear Disarmament. I worked as a photographer on Saturdays, played in a jazz band, listened with Dad to "The Goon Show" on BBC radio, and discovered a well-thumbed edition of Sigmund Freud's *The Interpretation of Dreams* in the public library. I read more widely – Orwell, Waugh, Dostoyevsky, The Beano, Dandy and Mad magazine – and began a career as a student of Psychology. Not far beneath the surface lay Psychology's existential crisis that remains unresolved to the present day.

Since Psychology's emergence in the 19th century, psychologists have struggled to establish a "science of mind and behavior" on par with Physics, Chemistry, or Biology. Psychology has always promised answers, with luminaries such as Freud, James, Calkins, Horney, Skinner, Eysenck and

Seligman announcing them. Instead of clarity and truth, however, the student discovers discordance and disagreement, unsolved knotty issues, methodological errors and, in at least one of these cases, blatant fraud.[4] Psychology is largely grouped with the "soft" social sciences – Sociology, Anthropology, Political Studies, and Economics – embracing diversity of approach but lacking unity. Never has it reached the much-vaunted status of "proper science".

Ludwig Wittgenstein's famed critique of 1947 remains painfully relevant: "The confusion and barrenness of psychology is not to be explained by calling it a 'young science.' … There are experimental methods and conceptual confusion. The existence of experimental methods makes us think we have the means of solving problems which trouble us; though problem and methods pass one another by."[5]

Sorry to say, but nothing has fundamentally changed. In 2020, Andrea Zagaria, Agata Andò, and Alessandro Zennaro likened Psychology to a "Giant with Feet of Clay."[6] The review revealed discordant definitions of core constructs and confirmed Psychology's inability to accumulate knowledge like the "hard" sciences. Psychology remains locked in a pre-paradigmatic state, its rival schools of thought blocking the emergence of a unified framework.

How is Psychology to break free from the all-too-apparent impasse? Each of us must 'do our bit', and this book is mine. I reason that, if Psychology is failing, this could be because *Psychology lacks an integrative, general theory of mind*. Soldiering on with multiple mini theories may cater for specific contexts in an artificial laboratory environment but it's papering over the cracks, not a solution.

Our strategy here is twofold: first, design a general theory of behavior capable of explaining behavior across species, situations, and scenarios; second, nudge Psychology towards thoroughgoing natural science. Although audacious, the project feels do-able. Our venture rests on a simple truth: that feelings, mind, and behavior adhere to universal principles that hold true in the rest of nature. Why would it be otherwise? I focus on a

[4] Marks, D. F. (2019). The Hans Eysenck affair: Time to correct the scientific record. *Journal of health psychology*, *24*(4), 409-420.
[5] Published posthumously: Wittgenstein, L. (1980). *Remarks on the philosophy of psychology, Volume 2.*
[6] Zagaria, A., Ando', A., & Zennaro, A. (2020). Psychology: A giant with feet of clay. *Integrative Psychological and Behavioral Science*, *54*, 521-562.

candidate for a universal principle that has been overlooked by psychologists.

A process that in my opinion stands head and shoulders above all others as a principle of nature is *homeostasis*. Homeostasis exists – and works – at every level of the natural world: cells, organs, bodies, groups, societies, and the planet. There is every reason to expect the existence of the same principle acting as a causal mechanism in regulating, not only physiology, but the psychology of mind and behaviour. Occam's Razor, leap of faith, and sheer curiosity converge in a growing conviction that the principle of homeostasis is, always was, and always will be, a universal principle of mind and behaviour. This claim is the corner stone for the "General Theory of Behaviour". If the theory can be robustly supported, then, for the first time, Psychology has a solid foundation as a natural science with laws, axioms and a cohesive explanatory structure.

The objective is to describe, explain and substantiate the General Theory as an explanatory account of voluntary behaviours and mental states of every known kind. The theory covers clinical, cognitive, comparative, developmental, existential, experiential, experimental, humanistic, neuro, social, and all other kinds of Psychology.[7] By design or default, data on psychological phenomena are collected in surveys, questionnaires, interviews, observational or laboratory studies–or simply in the armchair–but one's approach is inconsequential. According to the General Theory–all voluntary behaviour and all mental states are driven by a single principle, the "Law of Equilibrium".

It is saddening to have to put it this way, but the history of Psychology as a science has been nothing less than catastrophic. A series of severely fought–but unresolved–battles have put Psychology under the microscope. It will sound brutal but, with notable exceptions, the entire edifice could be assigned to history's dustbin without loss to human knowledge. Everyday commonsense serves equally well. Psychology has squandered vast amounts of human, animal and material resources tilting at windmills, failing to effectively relieve suffering by raising false hopes with largely non-efficacious therapies. In no particular order, Psychology's unresolved issues revolve around the problem of measurement,[8] lack of statistical

[7] Not all fields can be covered in this single volume.

[8] Michell, J. (1999). *Measurement in psychology: A critical history of a methodological concept* (Vol. 53). Cambridge University Press.

power,[9] failure of replication,[10] non-representativeness of research samples ("WEIRD"),[11] heterogeneity of findings,[12] accusations of pseudo-empiricism,[13] a lack of demonstrable progress,[14] and sheer fraud.[15] Collectively, these flaws signal that the game is up. Or is there an alternative path?

I answer this question using an alternative approach that has two, complementary objectives: (i) to advance Psychology as a cohesive natural science, and (ii) to unify Psychology as an integrated discipline. The preliminary steps toward these objectives are laid out in this volume.

First, a few words about our approach. In essence, we focus on patterns, axioms and testable predictions. Numbers appear fundamental. As in the case of Chemistry, where the number three features in the division of matter into solid, liquid, and gas; and 2 times 3 in the six-sided structure of benzene formulated by Kekulé (1929) (Figure P-2).

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[9] Cohen, J. (2016). A power primer. In A. E. Kazdin (Ed.), *Methodological issues and strategies in clinical research* (4th ed., pp. 279–284). American Psychological Association. https://doi.org/10.1037/14805-018

[10] Maxwell, S. E., Lau, M. Y., & Howard, G. S. (2015). Is psychology suffering from a replication crisis? What does "failure to replicate" really mean? *American Psychologist*, *70*(6), 487.

[11] Muthukrishna, M., Bell, A. V., Henrich, J., Curtin, C. M., Gedranovich, A., McInerney, J., & Thue, B. (2020). Beyond Western, Educated, Industrial, Rich, and Democratic (WEIRD) psychology: Measuring and mapping scales of cultural and psychological distance. *Psychological Science*, *31*(6), 678-701.

[12] Van Erp, S. J., Verhagen, J., Grasman, R. P., & Wagenmakers, E. J. (2017). Estimates of between-study heterogeneity for 705 meta-analyses reported in Psychological Bulletin from 1990-2013. *Journal of Open Psychology Data*, *5*(1).

[13] Smedslund, J. (1991). The pseudoempirical in psychology and the case for psychologic. *Psychological Inquiry*, *2*(4), 325-338.

[14] Smedslund, G., Arnulf, J. K., & Smedslund, J. (2022). Is psychological science progressing? Explained variance in PsycINFO articles during the period 1956 to 2022. *Frontiers in psychology*, *13*, 1089089.

[15] Craig R, Pelosi A, Tourish D. (2021). Research misconduct complaints and institutional logics: The case of Hans Eysenck and the British Psychological Society. *J Health Psychol.* Feb;26(2):296-311. doi: 10.1177/1359105320963542. Wicherts, J. M. (2011). Psychology must learn a lesson from fraud case. *Nature*, *480* (7375), 7-7.

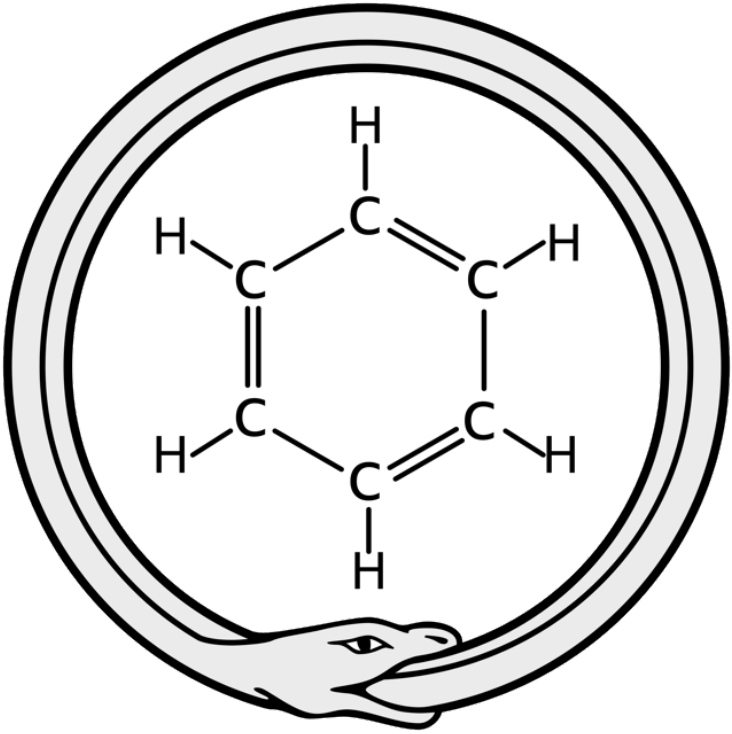

Figure P-2. The ouroboros, August Kekulé's inspiration for the structure of benzene. Kekulé saw this structure after a daydream of a snake eating its own tail. We discuss mental imagery in detail elsewhere in this book. Author: Haltopub Creative Commons Attribution-Share Alike 3.0 Unported

Benzene's hexagonal structure is crucial in organic chemistry and in crystallography, where certain elements and compounds adopt hexagonal close-packed arrangements, which influence their physical properties such as density and melting point.

Another integer–four–is also significant in Chemistry, and in many areas of science also (see Box 1, next page).

As indicated in Box 1, a significant number for Psychology is four.[16] The tetrad makes frequent appearances in psychological theory and, I believe, provides an important clue to a universal principle of mind and behaviour. Our approach is in line with Douglas Hofstadter's statement:

> "Deep understanding of causality sometimes requires the understanding of very large patterns and their abstract relationships and interactions…" [17]

Theories of causality emerge in cohesive orderings of patterns. A pattern of regularities and rules can take on newly discovered meaning even if it always existed, but nobody noticed. Writing about theories, Kenneth Waltz comments:

> A theory is a picture, mentally formed, of a bounded realm or domain of activity. A theory is a depiction of the organization of a domain and of the connections among its parts (d. Boltzman 1905). The infinite materials of any realm can be organized in endlessly different ways. A theory indicates that some factors are more important than others and specifies relations among them. In reality, everything is related to everything else, and one domain cannot be separated from others. Theory isolates one realm from all others in order to deal with it intellectually…The question, as ever with theories, is not whether the isolation of a realm is realistic, but whether it is useful. And usefulness is judged by the explanatory and predictive powers of the theory that may be fashioned.[18]

When one notices a pattern, it instantaneously becomes "blindingly" obvious, so one wonders why one hadn't seen it long before. In searching space for a pattern or object, it is helpful to know what kind of pattern of object one is looking for. If it's, say, a dog you're looking for–a particular kind of dog–then, hey presto, it pops out and you see it almost immediately. This is a well-known phenomenon among new car owners: buy a particular make and model and suddenly this particular car is everywhere. One's attention has become set as if by a template.

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[16] George A Miller famously claimed 7 as Psychology's "magical number": Miller, G. A. (1956). The magical number seven, plus or minus two: Some limits on our capacity for processing information. *Psychological review*, *63*(2), 81.
[17] Hofstadter, Douglas R (2007). *I Am a Strange Loop.* Basic Books. Kindle Edition.
[18] Kenneth N. Waltz (1979). *Theory of International Politics*. Random House. 8.

BOX 1: The number 4 in different scientific fields.

1. **Physics**:
- **Four Fundamental Forces**: The fundamental forces in physics are gravity, electromagnetism, the weak nuclear force, and the strong nuclear force.
- **Four Dimensions**: In the theory of relativity, spacetime is a four-dimensional construct with three spatial dimensions and one time dimension.
2. **Chemistry**:
- **Tetrahedral Geometry**: In chemistry, the tetrahedral molecular geometry is a common shape where a central atom is bonded to four peripheral atoms.
- **Carbon Valency**: Carbon has a valency of four, allowing it to form four covalent bonds with other atoms, leading to a variety of organic compounds.
3. **Biology**:
- **Four Bases of DNA**: DNA is composed of four nucleotide bases: adenine (A), thymine (T), cytosine (C), and guanine (G).
- **Tetrapods**: Many animals, including amphibians, reptiles, birds, and mammals, are tetrapods, meaning they have four limbs.
4. **Genetics:**
- A **tetrad** of four chromatids (two homologous chromosomes) that come together during the process of meiosis, specifically during the prophase I stage.
5. **Mathematics**:
- **Four Basic Operations**: The fundamental operations in arithmetic are addition, subtraction, multiplication, and division.
- **Four Colour Theorem**: In graph theory, the four colour theorem states that any planar map can be colored using four colors such that no two adjacent regions share the same color.
6. **Geology**:
- **Four Eras of Geological Time**: The Earth's history is divided into four major eras: Precambrian, Paleozoic, Mesozoic, and Cenozoic.:
7. **Psychology:**
- **Tetradic Theories of Behaviour**

Oftentimes, there is no template defining which particular features one must look out for–returning to dogs, is it spottiness, fluffiness, short-tail or long-tail, pointy- or floppy-eared, tall or small? Or is it not a dog at all? We turn to an example of a real-world visual puzzle in Figure P-3.

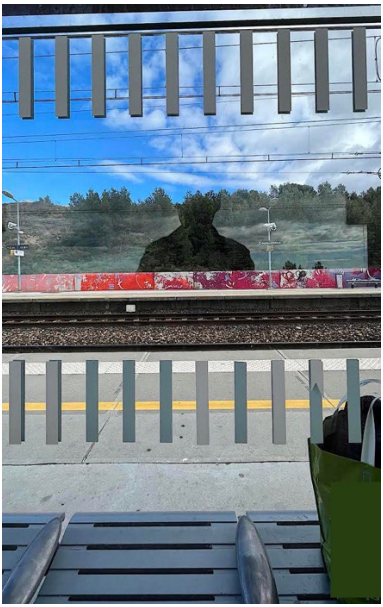

Figure P-3. What is one seeing here?[19] A view at a railway station platform from inside a waiting room. What are the vertical lines at the top of the picture, and what are they doing up in the sky? What are the vertical lines in the lower row, and why do some of them appear to be on the station platform? What is the shadowy figure doing on the hillside and how did it get there? Nothing seems to make much sense. We need a theory to explain what we are seeing. A clue is available on the lower right-hand side: two lines are on the camera's side of the shopping bag.

Difficulties recognizing patterns occur if we find ourselves in an unfamiliar environment, e.g., spending the first night in a strange hotel room looking for the light switches. To illustrate the issue in another context, consider the

[19] This image is easier to decipher when one knows that it has been photographed from inside a glass-paneled waiting room. The camera lens is positioned about 50 cm in front of a plate glass window decorated, in the same plane, with two rows of vertical rectangles. The shadowy figure against the hillside is the photographer's reflection in the windowpane. The perceived size of the 10 cm vertical lines is produced by a depth rescaling illusion. Without essential structural information, the image is difficult to decipher. It takes an explanatory theory–and a leap of imagination–for everything to snap into place. For details, please see: https://wp.me/pabp78-Xz

image in Figure P-3, a photo taken at a railway station. The photo reveals a slightly surreal impression that can be tricky to decode.

Like a theory of objects in a scene, a general theory for a knowledge domain should be able to explain everything in that domain. In the absence of a general theory, huge knowledge gaps occur, and a host of mini theories need to be invented case-by-case, which produces a disconnected hotchpotch.[20] From the multitude that are available, it is helpful to examine five examples of unanswered questions that expose the discipline's lack of a cohesive explanatory framework.

How do we explain altruism? Altruism is the effort of one individual to help another without personal gain. Altruism occurs in every human culture and across many animal species. One explanation is to deny it, to assume altruism is simply covert self-interest. The "Self-Interest Theory of Altruism" simply assumes that "pure" altruism does not exist.[21] The attribution of selfishness to altruism twists it into a transactional process for maximizing reward and minimizing costs.[22] The Self-Interest Theory is easily refuted by a series of exceptions. Consider, for example, the case of Chuck Francis Feeney (1931–2023), an American businessman and philanthropist. Feeney made his fortune as co-founder of "Duty-Free Shoppers Group", a travel retailer of luxury products based in Hong Kong. As founder of Atlantic Philanthropies, Feeney gave away almost his entire fortune of more than $8 billion. For many years, Feeney performed his philanthropy in secret.[23] Feeney's anonymous altruism contradicts the Self-Interest Theory and most other theories of altruism.

People do not need to be wealthy to be altruists; people from all socio-economic (SES) groups are altruistic. This observation is supported by the finding that 21% of online charitable donations are made anonymously.[24] A Chinese study found that (1) low-SES students behave more generously

[20] Psychology's use of mini theories can be likened to a plasterer using Polyfilla to fill holes in a wall.
[21] The view of behaviourist, B F Skinner.
[22] Valsala, P., & Menon, P. (2023). Psychospiritual basis of altruism: A review. *Journal of Humanistic Psychology*, *63*(3), 344-363.
[23] https://en.wikipedia.org/wiki/Chuck_Feeney
[24] Sisco, M.R., Weber, E.U. Examining charitable giving in real-world online donations. *Nat Commun* **10**, 3968 (2019). https://doi.org/10.1038/s41467-019-11852-z

than high-SES students; (2) students are more generous to low-SES recipients; and (3) affective empathy mediates altruistic behavior.[25]

How do we bounce back from trauma? (e.g., the COVID-19 pandemic): Bouncing-back after trauma is the most common trajectory for people with anxiety-depression and COVID-19-related PTSD. "A low-stable profile characterised by little-to-no psychological distress ('resilient' class)" is most common, which refutes the myth of a 'tsunami' of mental ill-health in populations affected by COVID-19 "[26] but nobody is quite sure why.

How do we bounce back from winning the lottery? I quote from an original source: "The sudden acquisition of a large sum of money, known as "wealth shock," can have unanticipated negative consequences, and actually cause greater unhappiness for its so-called beneficiaries. An extensive economic literature describes these negative consequences on a macro-economic level, but no coherent theory of wealth shock exists on a micro-economic level." [27] What is going on here? Why do big wins make people less happy?

How do we explain high rates of recidivism? In theory, the punishment of offenders should decrease the incidence of repeated offending. This assumption is the foundation for holding from the US population, 1.43 million persons in prison, with an additional 740,000 persons in local jails.[28] Yet the experience of postconviction imprisonment is found to have little or no impact on the probability of repeated offending. Most studies of pretrial incarceration find deleterious effects on post-release reoffending. An "official" explanation for the high levels of recidivism in released prisoners remains elusive.

How do we explain why nudges backfire? A nudge is a technique for drawing people's attention to a behaviour or behaviour change that is

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[25] Liu X, Zhang Y, Chen Z, Xiang G, Miao H, Guo C. Effect of Socioeconomic Status on Altruistic Behavior in Chinese Middle School Students: Mediating Role of Empathy. Int J Environ Res Public Health. 2023 Feb 14;20(4):3326. doi: 10.3390/ijerph20043326.

[26] Shevlin, M., Butter, S., McBride, O., Murphy, J., Gibson-Miller, J., Hartman, T. K., ... & Bentall, R. P. (2023). Refuting the myth of a 'tsunami' of mental ill-health in populations affected by COVID-19: Evidence that response to the pandemic is heterogeneous, not homogeneous. *Psychological medicine*, *53*(2), 429-437.

[27] Sherman, A., Shavit, T., & Barokas, G. (2020). A dynamic model on happiness and exogenous wealth shock: The case of lottery winners. *Journal of Happiness Studies*, *21*, 117-137.

[28] Loeffler, C. E., & Nagin, D. S. (2022). The impact of incarceration on recidivism. *Annual Review of Criminology*, *5*, 133-152.

congruent with a policy of some kind, e.g., to quit smoking or to eat fewer hamburgers. Essentially, nudging is marketing under another name. A vast amount of empirical work has focused on the potential of nudges to bring "lifestyle choices" in alignment with social policies. At the same time, there is a literature on nudge backfire effects "where the introduction of a nudge (e.g. a default, social norming, framing, information provision) generates behavioural change in the opposite direction of what was intended."[29] The explanation for "backfiring" has been elusive.

In Part Three, I show how all five phenomena–and many more besides–are given a single explanation by the General Theory. For now, it is good to remind ourselves of the reason we are here.

Why we are here

From a teenage schoolyard scrap to a reset for Psychology, so how on earth did we arrive here? I arrived here to tell a story about *striving,* the striving that drives all mental activity and behaviour. This is big. We are seeking *the causal mechanisms that make all voluntary behaviour and mental experience happen*. We seek to specify in full detail a *universal theory* to answer many unresolved questions illustrated above and many, many more. The contributors to this volume outline a preliminary body of evidence supporting my claim to have arrived at a general theory for all of Psychology. This is an exciting story to tell with twists and turns, and a single narrative involving the known world of living organisms in its entirety.

A primary source is my earlier monograph: *A General Theory of Behaviour* (AGTB).[30] Sections of AGTB are fully reproduced here in Chapters 1 and 2; other sections have been adapted at the request of the original publisher (Chapters 3-6). The Preface of AGTB uses a metaphor to frame Psychology as a medieval country:

> "The discipline can sometimes feel like a medieval country split into kingdoms by moats, walls and a haphazard set of paltry roads, odd rules and customs. As the visitor approaches the border of the country, a smart road sign reads: "Welcome to the Science of Psychology". Full of hope, one

[29] Osman, M., Dr. (2020, July 2). Backfiring, reactance, boomerang, spillovers, and rebound effects: Can we learn anything from examples where nudges do the opposite of what they intended. https://doi.org/10.31234/osf.io/ae756
[30] Marks, David F (2018) *A General Theory of Behaviour.* Sage Publishing.