



Ideas as Chemical and Biochemical Reactions

So far, we have relied on somewhat elementary mechanical metaphors in describing evidentiary driven idea systems.

Words such as “compact symbolic structures,” “chain-like complexes,” and preemptive structural “designs” evoke images from the domains of engineering and house construction. We have also borrowed the analogy of computer programming to explain “codification.”

“Distortion” and “error” suggest a deviation from an optimally functioning machine. The principles of formal and informal logic and of the idea of accuracy are presumed—such as when discussing whether ideas are justified or not justified, evidenced or not evidenced, erroneous or not erroneous. Even “coherence” sketches out a line between arbitrary, fragmented versus intricate, integrated constructions.

Scientifically speaking, all these mechanical conceptions, while useful, do not fully convey the *dynamic* and *situation-dependent* qualities of evidentially driven idea systems. Humans see and make connections, and form objects and thoughts, dynamically and actively, as do the “evidential” relationships between data and patterns.¹ To complement our

¹The principles of phenomenological psychology (especially regarding “Gestalt principles”) and ethnomethodological engagement with them are worth considering. Again, for an entry into the discussion, see Harold Garfinkel, “Ethnomethodological Misreading of Aron Gurwitsch on the Phenomenal Field: Sociology 271, UCLA 4/26/93,” eds. Clemens Eisenmann and Michael Lynch, *Human Studies* 44, no. 1 (April 2021), 19–42.

current framework of understanding, this chapter primarily uses additional metaphors from chemistry (including biochemistry) to more comprehensively capture the operational principles of idea systems.

EMPIRICAL RIGOR: A PHYSICAL SAFEGUARD OR CHEMICAL POISON?

To begin our exploration, we can first examine the presumed virtue of the so-called empirical rigor in the operation of ideas and idea systems. Along the lines of a mechanical metaphor, more rigorous thinking is more respectable: it would produce more justified and accurate ideas, which would in turn produce better social outcomes.

The history of witch hunts has shown an alternative possibility. *More* empirical rigor, more evidence, and more systematic application of codes are also very capable of generating *worse* atrocities. Of course, it could be hoped that if only people had the “right” evidence and “more” rigorous procedures, then fewer atrocities would have resulted. This viewpoint, while partially valid, may miss a significant part of how idea systems fundamentally work—that a whole set of alternative principles may be part of an idea system’s operation.

Let me illustrate this point by using a comparison which has been revealed by historians. In medieval Europe, around 1000–1200, the courts often processed crime allegations based on an *accusatorial* procedure. The general model was that crime accusations were initiated by private persons swearing on oath, providing evidence of proof. The judge’s role was primarily one of an impartial arbitrator of disputes between private parties. High-status individuals with an impeccable reputation may clear themselves by taking a purgative oath—or by the means of compurgation—whereby other honorable persons of high status, or a number of oath-helpers, would testify to the defendant’s character.² But if the accused was of lower status, or if there were insufficient witnesses willing to come forward, or if the private parties refused to resolve their dispute by oath, then alternative solutions might be sought. Such solutions did not concern further investigating a case or relying on a qualified judge’s personal judgment based on the available evidence; instead, the judgment was most

² James Q. Whitman, *The Origins of Reasonable Doubt: Theological Roots of the Criminal Trial* (New Haven and London: Yale University Press, 2008), 61–62.

often relegated, at least in name, to God. The two main forms of “divine” judgment were trial by combat (or battle) or by judicial ordeal.

Trial by combat—where, on some occasions, champions could be hired—was considered an acceptable way to settle certain disputes between high-status persons of equal rank; the premise was that God would be on the side of the winner. There were a variety of traditions regarding the exact forms and rules of the duel. Sometimes the accusers and accused could designate a warrior to fight on their behalf; sometimes both parties (or the combatants who fought on their behalf) were required to stake their lives in the process.³

Reserved for lower-status individuals, judicial ordeals were premised on the notion that God would reveal his judgment through certain signs. Common forms of ordeal included fire, hot water, morsel eating, and cold water—effectively various forms of the divinity test. The fire ordeals, for instance, involved subjects holding glowing iron bars with their bare hands or walking over red-hot ploughshare blades. Hot water ordeals involved the accused’s arms being inserted into boiling water to retrieve an object. The morsel ordeal involved subjects swallowing dry bread and cheese without water. Signs of choking or vomiting as well as visible physical damage after a brief period were interpreted by the authorities as evidence of guilt.⁴

These procedures may be “rigorous” in some ways. The bread and cheese, boiling water, glowing iron, and heated ploughshares were all consecrated, with specific texts being recited. The amount of bread and cheese, the number of ploughshares, the number of days for the wounds to be examined, as well as the quality of armor in battles were all meticulously detailed—therefore making them seem nonarbitrary and consistent, regardless of the content of specific cases. As an indicator of seriousness, these rituals often required the representative of a group or a party to

³ Obviously, there were significant variations to the issues of disputes where these methods could be applied, the degree of involvement of judicial authority, the requirement of social standing of participants, and so on. Gwyn Jones, “The Religious Elements of the Icelandic ‘Holmganga,’” *Modern Language Review* 27, no. 3 (1932): 307–13; F. J. Snell, *The Customs of Old England* (London: Methuen & Co. Ltd., [1911]2006), republished by Project Gutenberg (Salt Lake City, UT) on August 7, 2006 (EBook #19004): <http://www.gutenberg.org/files/19004/19004-h/19004-h.htm>; Whitman, *The Origins*, 78–79.

⁴ See Whitman, 59. Many cases of witchcraft and sorcery were processed via ordeal, but more reputable social members sometimes could receive “trial by compurgation”; that is to say, they simply needed to ensure a required number of people to swear in support of the defendant’s oath. Brian P. Levack, *The Witch-Hunt in Early Modern Europe. Third Edition* (New York: Routledge, 2006), 75–77; Whitman, 61–63.

perform the rituals *repeatedly*, invoking the name of God during oath avowal or consecration procedures.

There were other forms of “rigorous” procedures in the accusatorial model to guard against unjust prosecutions. For example, false accusations could lead to severe consequences. Moreover, on a personal level, it was a time when most people believed that lying under oath would surely entail foregoing salvation. Therefore, the textual recitation of an oath carried significantly more moral force and believed consequences than it would today. Furthermore, if an accusation was made that did not result in conviction, the accuser could be fined—or killed, in the case of judicial combat. “Random” chance potentially offered another form of protection. By the design of the divine tests, there was a good probability that some scalded or burned arms or feet would show sufficient signs of healing, and some of the accused would not choke after swallowing a morsel.

But these procedures—termed *accusatorial* in the historical literature—are not empirically “rigorous” in terms of finding out the nature of the case, providing an account with physical explanations of what happened with witchcraft. It was when the early modern period arrived in Europe (from late fifteenth to late eighteenth centuries) that a more modern form of jurisprudence gradually replaced the accusatorial model. This newer model was made up of *inquisitorial* procedures. Instead of being a somewhat passive arbitrator of conflict, the court was active in the inquiry and judgment of *facts*. An inquisitorial system relied on confessions, testimonies, and objective inspection as the primary sources of evidence.⁵

⁵ The aforementioned accusatorial elements never completely disappeared. Trial by combat was still legal in England in the 1700s. In Sweden as well as Iceland in the early 1600s, the accused could still be acquitted if a total of twelve people agreed to testify under oath on behalf of the accused person. In the context of Iceland, this standard seemed to be more rigorous than a minor case, such as paternity suits, which only required six oath-witnesses. Bengt Ankerloo, “Sweden: The Mass Burnings (1668–1676),” in *New Perspectives on Witchcraft, Magic and Demonology*, ed. Brian Levack (New York and London: Routledge, 2001), 306; Ruth C. Ellison, “The Kirkjuból Affair: A Seventeenth-Century Icelandic Witchcraft Case Analyzed,” in *New Perspectives on Witchcraft, Magic and Demonology*, ed. Brian Levack (New York and London: Routledge, 2001), 113. It is also important to note that the terminologies “accusatorial” and “inquisitorial” used here do not have universally identical meanings in the literature. For example, Goodare, while also discussing the general paradigm transition mentioned above, used the term to describe the distinction between the “customary system” and the “Roman system” of law to be “accusatory” versus “inquisitorial.” Julian Goodare, *The European Witch-Hunt* (London and New York: Routledge, 2016), 194–96. He wrote: “As a broad generalization, versions of the customary system were used in the British Isles, Scandinavia, Poland, Russia, and Hungary, while much of Germany, France, Italy and Spain used the Roman system—so called because it was based on the law of the ancient Roman Empire,” p. 194.

Presumably, the active use of human reason to gather physical evidence and construct coherent explanations should have mitigated such atrocities. However, in practice, in some instances it helped, while, in others, not so much. Actually, on aggregate, the opposite was generally the case. These regulatory institutions that came with the accusatorial model are today, by most standards, epistemologically arbitrary and unreasonable, bordering on “superstition.” Yet, as flawed as they were, they functioned as better safeguards against the arbitrary prosecutions of witches than what appeared in the slightly more “enlightened,” “rational” early modern period. The rate of successful prosecutions was hardly comparable. According to Whitman, “most probands, our English evidence suggests, came through the ordeal [institutions] unscathed.” Whitman attributes this phenomenon to the great reluctance of legal authorities and examiners to facilitate a wrongful conviction, which could lead to their own eternal damnation.⁶ Another kind of problem may be created by the accusatorial model—the prosecution of *any* crime was difficult because it often relied on similar procedures, so that formal accusations of any crime were rendered very rare during medieval times.

A chemistry-like dynamic and operational principle appears to be present. The two kinds of ideas, which give birth to two institutions, interacted with the two contexts and produced two different kinds of chemical reaction. When activated in a particular form and context by particular people in a particular situation, varying “compounds” and “reactions” of sorts are formed. Some of the “same” chemical elements that are observed to cause explosive destruction or poisonous attack in one may have mitigating effects in another, with a slightly different context and arrangement. I use the metaphors *catalysts* and *inhibitors* to further explore these dynamics.

CATALYSTS AND INHIBITORS

Molecules are chain-complexes consisting of various substances—atoms, elements, or molecules—forming bonds together based on chemical force. Some chemical products, such as the toxin maitotoxin ($C_{164}H_{256}Na_2O_{68}S_2$), have an extremely extended structure, whereas others, such as the multi-purpose ammonia (NH_3), have a simple one.

⁶Whitman, *The Origins*, 65.

Iron-based *catalysts* are generally needed to make ammonia industrially, as they accelerate the reaction between nitrogen and hydrogen (primarily by reducing the energy requirement for a reaction to occur). Without catalysts, NH_3 generally could not be formed by the simple copresence of N and H. The types and amounts of catalysts change the reaction processes, affecting their speed, forms, activities, and by-products, and thereby the possibilities of respective practical applications. By contrast, a reaction *inhibitor* could drastically decrease the rate of chemical reaction, principally by increasing the energy requirement for a reaction to occur. Depending on their applications, they can selectively allow some processes to occur, while inhibiting others.

Catalysts

From our previous discussions, we can see several ideas that had catalytic effects on the scale and activities of witch hunts. Their introduction greatly accelerated a change in the dynamic to the idea system, unleashing its potential at an impressive rate.

Torture. Ideas that legitimized and enabled severe torture, such as those that theorized the “breaking point of witches” and the “sorcery of silence,” had far-reaching impact. They were not a formal part of the idea system concerning witchcraft; they could be added in or taken out by actors without, at least theoretically, affecting the integrity of whole idea systems.

But the torture these ideas enabled had unleashed thousands of pieces of information and ideas, both specific to local cases and to the idea system as a whole.⁷ One line of chain reaction torture produces goes as follows. Torture created very gruesome symbols visible in the community. In so doing, it spread an atmosphere of pressure in the social space, which made conformity and confession easy. Those accused could simply abandon their resistance and confess in detail “voluntarily” if they were exposed to the potential for torture. A general pattern indicates torture’s catalytic effects: places that disallowed torture had significantly fewer witch executions.

Repentance. Another exemplary catalyst was the idea that full repentance could help witches attain the possibility of salvation, even if they were to be executed. For this idea, the Church had stipulated that only

⁷This is also to say that without the ideas legitimizing torture much of the information and data would not have entered into the idea system.

unrepentant witches were to be burned at the stake, one of the most excruciating ways to die; others might be offered a less painful means of death, or even a way to return to their community. This precipitates a chain of consequences. Such an idea makes burning seem more humane and justified; a thin veneer of kindness was overlaid to the otherwise naked cruelty. Second, proffering this idea provides incentives to the accused to confess fully and early. Such confessions, in turn, yielded a wealth of details and information as a result. In summary, even though the idea may be harmless in itself, its introduction to the idea system makes it a catalytic driver to sustain witch hunts.

Witch Sabbaths. The theory of witch sabbaths must be one with the utmost catalytic effect. The size of a sabbath could be in the range of fifty to several hundreds. In some cases, such as the French poet Martin le Franc, it was suggested that the attendance could be from 3000 to 10,000, and some 600 women had confessed to an intercourse with the Devil.⁸ More exaggeratedly, a German news sheet claimed that 18,000 witches had assembled together “with the aim of devastating the countryside.”⁹ This idea steered the interrogation and torture efforts for a complete list of names of witches and participants in the sabbath—thus creating chain-reaction witch hunts and witch panic.¹⁰ It suggested that if one witch was found, then, deductively, he or she would have knowledge of other witches. And if one witch witnessed many repulsive and despicable actions participated by some of them, it made it all the more urgent to reveal everyone involved in the network.

The aforementioned ideas each provided chain-like effects on their own, and their interactive combination is arguably more potent than their individual presence. The lack of one key catalyst, for example, could reduce the chain reaction considerably.

Agents as Catalysts. Besides catalytic ideas, there were also catalytic actions performed by catalytic agents. Exceptionally skillful, creative, and purposeful people—such as the demonological theorists and jurists—mixed various ingredients to create chemical reactions that would otherwise not have happened.

⁸ Henry Charles Lea, *Materials Toward a History of Witchcraft* (Philadelphia: University of Pennsylvania Press, 1939), vol. I, 250.

⁹ Peter G. Maxwell-Stuart, *Witchcraft in Europe and the New World, 1400–1800* (Basingstoke, UK, and New York: Palgrave, 2001), 61.

¹⁰ Wolfgang Behringer, *Witches and Witch-Hunts: A Global History* (Cambridge, UK, and Malden, MA: Polity Press, 2004), 59.

Surprisingly, a special class of subjects that has proven to be a catalyst in many witch hunts is children.¹¹ Certain qualities made children powerful catalytic agents: they are imaginative and susceptible to fantasy, and, moreover, their thoughts, their behaviors, and their words are largely unrestrained. One aspect about children could not quite be matched even by the most childish of adults. When children are in a social setting with a peer of others of approximate age, they interact with one another according to a distinct set of rules and protocols. In the institution inhabited by these peer groups, members often recreate their fantasies filled with visual details and did so somewhat naturally. After a “reality” is formed by their interactions, they are quite capable of deluding others as well as themselves regarding what is real. Aside from the animated details that they live by, and perhaps also a conflation between the real and the fanciful, there are other reasons that made children’s testimonies seem trustworthy and credible to some. Children are not considered to be as calculative, self-sanctioning, and interest-driven as members of the adult world—and sometimes their testimonies quite clearly seem to be in conflict with their own interests, putting themselves and their loved ones in danger. But discarding these one-sided romantic pictures, pragmatically speaking, children are more vulnerable than adults in some ways, having less experience in life. They are more economically dependent, and potentially more easily subject to social and adult pressure. In the phase of early socialization and development, torture and intimidation may also have a stronger coercive impact on them. These factors make children’s accounts such a damningly powerful tool.

The Blåkulla mass trial shows the way children’s catalytic potential was deliberately activated and exploited. The largest waves of witch panic in Sweden took place in the 1660–1670s, during which time many people were accused of “flying” to a witch assembly at Blåkulla, a mythical island

¹¹ Johannes Dillinger, *“Evil People”: A Comparative Study of Witch Hunts in Swabian Austria and the Electorate of Trier*, trans. Laura Stokes (Charlottesville, VA, and London, UK: University of Virginia Press, [1999]2009), 104–6, Originally published as *“Böse Leute.” Hexenverfolgungen in Schwäbisch-Österreich und Kurtier im Vergleich* by Paulinus Verlag/Spec, Trier, Germany. Dillinger discussed the role of children starting chain-accusations in both the larger regions of the electorate of Trier after the trial against Dr. Flade, and in southern regions of Swabian Austria around 1594, as well as other cases. Their presence, both younger and older children, also added much force in the cases of Trier and Loudun. Of course, the role of children in the Salem Witch Trials of 1692–1693 in colonial America has been comprehensively examined.

where the Devil held his sabbaths. As many as several thousand people had appeared in court in total, many of whom were children said to possess a special ability to identify witches. According to the historian Ankarloo, many of them were essentially young orphans abandoned by their parents. Some of them were paid, and sometimes the witnesses enacted a “combination of begging and blackmail.”¹²

In the North about a fifth of the young witnesses provided more than half of the evidence. These energetic and vindictive children also displayed a marked conformity in their accusations, often directing them at local family groups.¹³

The children were under tremendous coercion and pressure, from both adults and their peers. Several of them appeared to be kept awake in “wake houses”—suggesting some minor form of sleep deprivation—“with constant prayer and hymn singing.” The children began to provide similar and satisfying accounts to their questioners, “If anyone showed signs of hesitating and wanting to back out, he or she was immediately branded as a suspect by others.”¹⁴ They were labeled as “liars.”¹⁵ The overall, converging story was that they were blindfolded and abducted, and then taken to the sabbath. They could not see each other until they reached Blåkulla. In manufacturing their full stories, they made use of actual events they knew, such as the illnesses and deaths of people and animals, or marks on their bodies that showed signs of physical abuse.¹⁶ Although the adults who exploited these children might be the *actual* catalyst, there is little doubt that children’s own dynamics and qualities made many contributions in their own right.

Another catalytic agent was anyone—adult or child—identified as having a special ability to “see” specters and identify witches. Confessing witches and afflicted victims, among other exceptional individuals, were

¹² Ankerloo, “Sweden: The Mass Burnings (1668–1676),” 302.

¹³ Bengt Ankarloo, “Witch Trials in Northern Europe: 1450–1700,” in *Witchcraft and Magic in Europe: The Period of Witch Trials*, eds. Bengt Ankarloo, Stuart Clark, and William Monter (London: Continuum and Philadelphia: University of Pennsylvania Press, 2002), 89.

¹⁴ Per Sörlin, “Child-Witches and the Construction of the Witches’ Sabbath: The Swedish Blåkulla Story,” in *Demons, Spirits and Witches. Vol 3. Witchcraft, Mythologies and Persecution*, ed. Gabor Klaniczay and Pocs Eva (Budapest: Central European University Press, 2008), 102–3.

¹⁵ Ankarloo, “Sweden: The Mass Burnings,” 303.

¹⁶ Sörlin, 104.

commonly believed to have such abilities. Their testimonies, in turn, helped to generate “spectral evidence” in court. This form of evidence, even in just corroborative capacity, was commonly admissible in many courts until the seventeenth century.¹⁷ Where this idea of spectral evidence took hold, some of the accused were turned into “star witnesses”—akin to the role adopted by Tituba in the Salem witch trials.

Inhibitors

In contrast to a catalyst, the insertion of an *inhibitor* helps to paralyze, derail, or decrease the development or impact of an idea system.

Counter-magic. One such example is counter-magic. Once there are trusted methods to counter or limit diabolic power, witchcraft becomes much less fearful, which in turn mitigates panic and the sense of urgency to conduct executions.

Witches were barely, if at all, prosecuted in the Central Balkans. In the area it was believed that voluntary confessions “made to a priest, but also, it is said, to the earth or to the green grass, with an oath, three times repeated, never to practice witchcraft again,” were sufficient. This practice causes witches to lose their supernatural powers, and they “can never recover them”—an idea that made forgiveness and acquittal considerably easier. In the same area, there were a variety of documented custom procedures that could prevent the babies of witches from being turned into witches themselves. One was for a grandmother or an older woman in the household to announce loudly to the whole village on a rooftop or in the courtyard, in exact wordings that vary by location, that a witch was born in the household. Another was leaving a newborn baby out on the street so that a passerby could give it a new name. Such societies offered ideas that allowed witches to almost seamlessly reintegrate into the community after rituals were performed.¹⁸

Catholic doctrine and exorcism. There was also a marked difference between Catholic and Protestant jurisdictions regarding the causes and treatment toward possessions. The Catholic doctrine allowed more leniency toward subjects possessed by the Devil because of certain built-in inhibitors.

¹⁷Levack, *The Witch-Hunt*, 3rd ed., 263.

¹⁸T. P. Vukanović, “Witchcraft in the Central Balkans I: Characteristics of Witches,” *Folklore* 100, no. 1 (1989), 21.

For Protestants, possession was often linked to the theory that witches caused demons to possess people. There was at least partial moral responsibility from an ill intent—such as the intention to cause harm upon another person—that leads to an opportunity for demonic possession. Calvinists, in particular, linked sinfulness with moral culpability; that is to say, those who were tempted to sin were more likely to sign a pact with the Devil.¹⁹ Protestants believed that subjects did not completely lose their free will during possession; because the possessed often spoke in two voices, it was an indication that the demon was within a person and in conflict with him or her. The solution of the witches' threat, and the punishment of deeds, therefore resided in formal witch trials. Prayer and fasting were recommended, even if they might not counter the fits perfectly—in which case possible blame was placed on individuals' persistent impurity.

For Catholics, there was a different understanding of possession. It was believed that the Devil had will of his own, and he possessed individuals by his own power. The possessed people were not necessarily witches. The moral responsibility primarily lay with the Devil himself. Instead of persecution, exorcism was often the solution—even if this practice was occasionally criticized, especially if it was undertaken without proper approval. As a result, there were notably harsher consequences for the demonically possessed in Protestant jurisdictions—and they were linked to witch identity—than those in Catholic ones.²⁰ This is to say, aside from organizational factors, certain interpretations of possessions in Catholic institutions served to inhibit witches' executions.

Counterinterpretations. A main source of inhibitor was a body of select passages from authoritative texts which made room for counterinterpretations. The *Canon Episcopi*, or simply the *Canon*, has a special place in such activities. Although the *Canon* declared that “bishops and their officials must labor all their strength” to eliminate witches from their parishes, it offered a harsh denunciation of people who reinforced false beliefs revolving around witches. The *Canon* stated that “some wicked women, perverted by the Devil, seduced by illusions and phantasms of demons” were convinced that they were indeed flying at night with the pagan goddess Diana, and it utterly mocked those who were deluded into treating such accounts as if they were actual events. It asked who has not had so-called

¹⁹ Levack, *The Witch-Hunt*, 3rd ed., 206.

²⁰ Brian P. Levack, *The Devil Within: Possession and Exorcism in the Christian West* (New Haven, CT: Yale University Press, 2013).

nocturnal visions while they dreamt, and why would anyone who was not “stupid and foolish” mistake such visions for actual reality. In conclusion, the *Canon* made a strong declaration:

It is therefore to be proclaimed publicly to all that whoever believes such things or similar to these loses the faith, and he who has not the right faith in God is not of God but of him in whom he believes, that is, of the Devil. For of our Lord it is written ‘All things were made by Him.’ Whoever therefore believes that anything can be made, or that any creature can be changed to better or to worse or be transformed into another species or similitude, except by the Creator himself who made everything and through whom all things were made, is beyond doubt an infidel.²¹

Such strong wordings from an authoritative text facilitated many actors who wished to make counterinterpretations that still fall within acceptable parameters. Numerous skeptics had made use of the *Canon*, enabling skeptical voices from jurists and theologians to influence local courts, at least within Germany.²² The widened discourse parameter permitted severe disagreement as long as the skeptics also reaffirmed their faith in God, the existence of Satan, and the necessity to root out witchcraft.

To use one illustrative example, an early skeptical thinker, Ulrich Molitor, argued, among other points, in his 1489 treatise (*De Lamiis et Pythonicis Mulieribus*), that the Devil created the mental illusions of sabbaths, that he could not beget children, and could not raise storms. There is a strong quality of inhibitor in these three ideas alone. Delegitimizing the sabbath from discourse would prevent chain-reaction naming. Stating that the Devil could not beget children at least de-linked the children of witches from the Devil at some level. Finally, Molitor theorized that the Devil did not have the power to raise actual storms—and thus neither could witches. What actually occurred, according to Molitor, was that the Devil had some ability to know of an incoming storm and merely let the witch think that the storm was of their making. The political implication is important. Because storms had caused massive destruction to the economy and lives of the region, the idea of witches’ role in causing them motivated many to identify and eliminate them. Without actual power, there would be less urgency—less “panic” emotions—to eradicate witches,

²¹ Lea, *Materials*, vol. I, 178–79.

²² see Alison Rowlands, *Witchcraft Narratives in Germany: Rothenburg, 1561–1652* (New York: Manchester University Press, 2003), 56; Dillinger, “*Evil People*,” 65–66, 90, 138, 167.

especially in questionable cases, even if they still ought be prosecuted by heresy.²³ Finally, according to historian Maxwell-Stuart, Molitar concluded that Satan could be overcome by relatively simple measures: “All we need do is make the sign of the cross and his ability to exercise any power over us is rendered null at once.”²⁴

POISON OR MEDICINE?: THE INTRICACY OF CHEMICAL REACTIONS

What makes catalysts and inhibitors so difficult to identify is that, assessed in their content, one is not necessarily distinguishable from another in terms of their merit or danger. It is akin to the principle of Chinese medicine, where one herb that has poisonous effects can also medically cure a disease.

The inquisitorial legal idea that catalyzed witch hunts was certainly not inferior to the accusatorial idea; only when it interacted with other elements did the idea become a catalyst. The idea of the sabbath, for example, is not necessarily any more absurd or contemptuous an idea than the belief that exorcism could drive out the Devil. It was only in the context of the witch hunt phenomenon that it became an important catalyst. Likewise, misogyny alone did not cause witch prosecutions. Most of the witches, prior to the sixteenth century in the Holy Roman Empire, for example, were actually men.²⁵ Neither was poverty in itself a powerful factor, or the respective religion of the people. It was highly dependent on a particular combination, a particular composite, or synthesis, that witches were stereotyped as poor, irreligious women who attended sabbaths and committed ungodly acts that threatened everybody socially.

The absence of one can be “made up” by another to achieve similar effects. For example, while England did not have the widespread concept of a “sabbath,” seemingly “spontaneous” series of mass possessions could

²³ Maxwell-Stuart, *Witchcraft in Europe*, 32–42.

²⁴ Maxwell-Stuart, 34.

²⁵ Maxwell-Stuart argues that the publication of the *Malleus Maleficarum* played a significant role in changing the identity of witch-suspects from men to women. The word “maleficium” was the feminine form of “maleficium,” and a number of treatises before Kramer’s publication had used maleficium as a masculine noun to refer to both men and women. Maxwell-Stuart, 30. The treatises and trials immediately prior to the mid-fifteenth century had a more equal, and sometimes even male-centered, gender emphasis. Maxwell-Stuart, 17–23.

still trigger a chain-reaction panic around 1600, with affirmation by the Protestant clerics who elevated witchcraft from an ordinary civil dispute into a spiritual crime.²⁶ Once torture was prohibited, swimming and a variety of “tests” and examinations took its place in England. The justification for stripping suspects naked upon their imprisonment—and walking them all night to prevent them from sleeping—was not due to the sorcery of silence. Such acts, though they might only occur in a particular time in England, were allegedly because, if witches were at rest, they could summon their familiars to frighten the guards.²⁷

Situational contexts also matter. The same ideational practice—such as the doctrine of repentance—could encourage thorough confessions and moderate outcomes in one context, especially if leniency is seen to be extended to children and the accused are children. But if it is combined with the context of the theory of a breaking point, the result could be a long chain of denunciation and a personal death sentence. Many local people, we can assume, weighed these situational factors carefully and strategically as they developed their specific ideas.

Creative Agency: By a Hair's Difference

Exceptionally thoughtful individuals made a difference in organizing, using, articulating, and extending or suppressing idea systems. Some individuals fought to insist and privilege one interpretation or to use a few artful moves to turn a representation upside-down—by almost a hair's difference in interpretation sometimes. These exceptional agents know how to manipulate the codes and codification processes creatively and precisely, navigating the intricacies and complexities involved in specific discourse battles.

For example, the *Canon Episcopi*—which contained an inhibitor—could be and had been skirted around by creative interpretations, or a new adaptation using fresh evidence. A renowned Spanish theologian, Alonso Tostado, had argued around 1440 that the *Canon* only argued that a belief in Diana or Herodias as goddesses, or that people had ridden on

²⁶ Malcolm Gaskill, *Witchfinders: A Seventeenth-Century English Tragedy* (Cambridge, MA: Harvard University Press, 2005), 29; see also Roland Seth, *Stories of Great Witch Trials* (London: Arthur Barker Ltd., 1967).

²⁷ Matthew Hopkins, *The Discovery of Witches* (The Project Gutenberg, [1647]2004), Quer. 8–9, The Project Gutenberg eBook, November 10, 2004 [eBook #14015] <https://www.gutenberg.org/files/14015/14015-h/14015-h.htm>

beasts, was inappropriate. Night-flying itself was possible if it entailed riding on demons in the shape of a beast, and the figures of Diana or Herodias could also be demons in disguise. They referred to some cases of women in Spain who were observed to have temporarily fallen into “a stupor, insensible to blows and fire,” but upon awaking in a few hours recounted their experiences at the sabbath.²⁸ For Tostato, as long as one does not believe Diana to be an actual goddess, or the beasts to be ordinary animals, one was not being unfaithful to God. Indeed, technically, the *Canon* did not explicitly doubt the ability of the Devil to appear as a beast. After all, the *Canon* had affirmed the impressive effect of “illusions and phantasms of demons” on wicked women.²⁹

The *Malleus Maleficarum* made the same defense as Tostato, but further elaborated it. Taking a different route, the *Malleus Maleficarum* questioned the thesis in the *Canon* that “witches cannot be locally transported because God does not permit it.”³⁰ In an exercise of logic, Kramer simply challenged how one could conclude that God does not permit the Devil to do so with the Devil’s servant when the Devil could already do so with the innocent. The *Malleus Maleficarum* asked: “did not the Devil raise up Our Savior, taking and setting Him here and there, as the Gospel testifies?”³¹ Several other defenses against the *Canon* followed. Citing many “empirical” examples from cases, “who is so stupid that he would on these grounds affirm that all the acts of sorcery and harm committed by sorcerers are figments of fantasy and imagination, when the opposite is clear to everyone’s senses.”³² Furthermore, the rigorous reasons between witchcraft proponents when comparing them to those of the skeptics should not be underestimated, especially if the skeptics sought to argue against the *Malleus* using fast-and-rough arguments and by strategically using the *Canon*. Rating argumentative rigor, the brief passage of *Canon* versus *Malleus Maleficarum* might very well end in a draw, and the *Malleus Maleficarum* was furnished with plenty of “empirical” data.

²⁸ Lea, *Materials*, vol. I, 190–91.

²⁹ Lea, 178. See also Walter Stephens, “The Sceptical Tradition,” in *The Oxford Handbook of Witchcraft in Early Modern Europe and Colonial America*, ed. Brian P. Levack (Oxford, UK: Oxford University Press, 2013), 113.

³⁰ Christopher S. Mackay, *The Hammer of Witches: A Complete Translation of the Malleus Maleficarum* (Cambridge, UK: Cambridge University Press, 2009), 300.

³¹ Mackay, *The Hammer of Witches*, 296.

³² Mackay, 301.

In summary, evidential processes in idea systems operate more dynamically than mechanical frameworks and metaphors usually afford. We can still consider the “science” of it, but this science is, in addition to its mechanical basis, contingent upon the precise combination of ideas applied in specific contexts.

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