

Merimnatic Superposition

Freedom, choice, and the will: SUM in dialogue with established views

Without merimnatic superposition, freedom is either predetermined or arbitrary — and in neither case does the direction of the act leave a genuine qualitative mark.

The philosophical problem of freedom is as old as systematic thought. Can a being be genuinely free inside a causally determined universe? If it can, what kind of freedom is that? If it cannot, is freedom an illusion? And if freedom is real, how does a free act leave a mark — how does the direction of a choice become the structure of a character, and not merely a random event in an otherwise determined sequence?

Every major tradition that has wrestled with this question has identified the same tension: genuine freedom seems to require both that the act is authored — genuinely the agent's own — and that it is not predetermined by prior causes. The difficulty is that these two requirements seem to pull against each other. An act authored by prior causes is determined, not free. An act uncaused by prior states is random, not authored. The history of the philosophy of freedom is largely the history of attempts to hold these two requirements together without collapsing into determinism on one side or randomness on the other.

SUM's merimnatic superposition enters this debate with a formal structural proposal rather than a metaphysical argument. What follows is a comparative analysis: how does the SUM account stand in relation to the major established positions?

Hard Determinism

Spinoza · La Mettrie · contemporary neurodeterminism

The hard determinist position holds that every event, including every human choice, is the inevitable result of prior causes operating according to natural law. Freedom of the will is an illusion produced by ignorance of the actual causal chain. Spinoza: the feeling of freedom is simply the feeling of not knowing the cause that compels us. Contemporary neurodeterminism: the brain generates the decision before

consciousness registers it; the sense of choosing is a post-hoc narrative constructed around a process that was already complete.

The structural claim: there is no genuine superposition before the act. The act was determined before it was experienced as a choice. The apparent deliberation is the experience of a mechanism running, not the experience of a superposition holding.

SUM response: Hard determinism can account for the physical event but not for its qualitative weight. The Merimnaton is not a claim about the physical causal chain — it is a claim about the Q-dimension structure of the event. Even if the physical outcome is determined in M_4 , the qualitative field holds both directions in genuine superposition in Q before the M_4 outcome manifests. The qualitative superposition is real regardless of whether the physical outcome was causally determined. This does not resolve the determinism debate in M_4 ; it points out that the debate has been conducted entirely in M_4 and that Q has not been included in the account. What hard determinism cannot explain is why the direction of acts accumulates into character topology in Q — why the same physical stimulus produces structurally different qualitative weight in fields with different $SQ\xi$. GRAVIS and the $SQ\xi$ are not explained by causal chains in M_4 alone.

Compatibilism

Hume · Locke · Frankfurt · Dennett

Compatibilism holds that freedom and determinism are not mutually exclusive. A free act is not an uncaused act — it is an act caused by the right kind of cause: by the agent's own desires, values, and deliberative processes. Freedom is not the absence of determination but determination by the self rather than by external compulsion. Harry Frankfurt's influential version: freedom is not about whether you could have done otherwise in the same circumstances but about whether your action flows from desires you endorse at a higher level — desires about your desires, second-order volitions.

Frankfurt's hierarchy of desires is structurally the closest existing account to merimnatic superposition: the deliberative structure is one in which the will acts on itself, and freedom is located in the alignment between first-order and second-order desires rather than in the absence of causation.

SUM response: SUM is structurally compatibilist in the sense that it does not require freedom to be uncaused. The merimnatic superposition holds both directions in Q before the collapse, and the collapse is authored by the field — it is the field's own collapse, not an external one. What SUM adds to Frankfurt is the formal structure of the superposition itself: Frankfurt describes the hierarchy of desires but does not formally describe the state before the collapse, the co-presence of both directions with their full qualitative weight. The Merimnaton names what Frankfurt gestures at but does not formalise: the specific qualitative state in which the act is genuinely undetermined by the hierarchy of desires precisely because the hierarchy itself is what is held in superposition. SUM also adds what Frankfurt's account lacks: a formal mechanism by which the direction of the collapse accumulates into character (*Solidum Qualitatis*) and transmits across generations.

Libertarian Free Will

Kant · Chisholm · agent causation

Libertarian free will (not political libertarianism) holds that genuine freedom requires that the agent could have done otherwise in exactly the same circumstances: that the act is not determined by prior causes but is the originating cause of itself. Kant located this freedom in the noumenal realm, outside the causal order of the phenomenal world: the rational will operates according to the moral law (the categorical imperative) precisely because it is not subject to the deterministic causality of nature. Roderick Chisholm: the agent is an unmoved mover within the causal order, capable of initiating a causal sequence that was not itself caused by prior events.

The difficulty for libertarian accounts is explaining how an undetermined act can nonetheless be authored — how an act that is not caused by prior states of the agent can still be genuinely the agent's own rather than random. This is the classic randomness objection: indeterminism (even quantum-level indeterminism) does not produce freedom; it produces noise.

SUM response: The merimnatic superposition resolves the randomness objection by locating the freedom not in the absence of causation but in the genuine co-presence of both directions in Q before either is actualised. The collapse is not random — it carries the full qualitative weight of both directions and the specific GRAVIS load of what is at stake. It is also not determined by prior causes — the $SQ\xi$ weighs the field in a direction but does not close the superposition; the superposition remains genuinely open. What collapses it is the field's own authorship: the specific exercise of freedom in Q that Kant located in the noumenal realm but could not formally describe within his framework. SUM does not import a noumenal realm. It describes what Kant was pointing at in the Q dimension of M_5 , where the formal structure of the non-determined but authored act is specified precisely.

Sartrean Existentialism

Sartre · radical freedom · bad faith

Sartre held that consciousness is defined by its radical freedom: existence precedes essence, which means the human being has no predetermined nature that determines its acts. Every moment of consciousness is an act of self-creation. There is no prior self that determines the choice — the self is constituted by the choices, not prior to them. Bad faith is the attempt to deny this freedom: to act as if one were determined by one's nature, role, situation, or past, when in reality one is always free to choose otherwise.

Sartre's account is the most radical assertion of freedom in the philosophical tradition. Its difficulty is the opposite of the determinist's: if freedom is absolute and the self is

entirely constituted by choices, the weight of responsibility is unlimited and the self has no prior structure that makes any choice more or less natural than another. Sartre's freedom is formally weightless: any direction is as freely chosen as any other.

SUM response: Sartre correctly identifies that the self is constituted by its choices rather than simply expressing a prior nature — the Solidum Qualitatis is exactly the structure that choices build. But Sartre's freedom is formally weightless, and SUM's is not. The merimnatic superposition holds both directions with their full qualitative weight: the direction toward Love is not equivalent to the direction away from it in terms of what it costs the field to hold and what it produces in the character layer. Sartre's bad faith — the denial of freedom — maps precisely onto P4 and P2 in SUM: the suppression of the merimnatic signal (P4) and the displacement of its weight onto an external cause or situation (P2). But Sartre has no formal account of why repeated collapses in the direction of bad faith accumulate into a structure that makes the next choice harder — the SQξ is exactly this account, and it is what Sartre's framework lacks.

Process Philosophy

Whitehead · creative advance into novelty

Alfred North Whitehead's process philosophy holds that every actual occasion — every moment of reality — involves a creative advance into novelty: the integration of the given past (what Whitehead calls prehension of the actual world) with a free creative response that determines the specific character of the occasion. Freedom is not the absence of the past but the creative synthesis of the past into something that was not determined by it. Every moment of experience is genuinely novel in a way that prior causes could not have fully predicted.

Whitehead is structurally close to SUM in several respects: the universe is constituted by occasions of experience, every occasion involves the integration of received weight with creative response, and the accumulation of occasions constitutes the character of the ongoing entity. The dipolar structure of each occasion — physical pole (received from prior occasions) and mental pole (creative response) — anticipates the M_4/Q structure of M_5 .

SUM response: Process philosophy is the existing account that comes closest to the SUM structure. The creative advance into novelty is the Whiteheadian name for what SUM calls the merimnatic collapse: the moment at which received weight (SQξ, GRAVIS load, intergenerational topology) is integrated with a specific free response that was not determined by the past. The dipolar structure (physical pole / mental pole) maps onto M_4 / Q . What SUM adds to Whitehead is the formal specification of the qualitative superposition before the collapse: Whitehead describes the creative synthesis but does not formally describe the co-presence of both directions as a structural feature of the occasion before the synthesis occurs. The Merimnaton names what Whitehead's creative advance presupposes but does not formalise.

Quantum Indeterminism and Freedom

Penrose · Stapp · quantum mind

Several contemporary accounts attempt to locate the basis of free will in quantum indeterminism: the genuine randomness of quantum events at the physical level provides the non-determined space within which free will operates. Roger Penrose (with Stuart Hameroff) proposes that quantum processes in microtubules within neurons are the physical basis of consciousness and of non-algorithmic freedom. Henry Stapp holds that quantum mechanics requires a conscious observer whose acts of observation are not determined by the prior physical state, and that this observer-role is the formal basis of free will.

The difficulty with these accounts is the randomness objection again: quantum indeterminism is random, not free. A quantum event that is not determined by prior physical states is not thereby an authored act. The randomness of the quantum level does not produce freedom unless there is a principle by which the random is converted into the authored.

SUM response: SUM endorses the structural intuition behind quantum accounts of freedom — that genuine freedom requires something beyond classical determinism — but locates it in Q rather than in quantum randomness within M_4 . The merimnatic superposition is not a quantum event in M_4 (quantum randomness); it is a Q-dimension event: the genuine co-presence of both qualitative directions before the conscious field's own collapse. This is not random. It is authored: the collapse is the field's own act in Q, with the full weight of the GRAVIS load as its content. The parallel with quantum superposition is structural, not causal: both involve genuine co-presence of multiple states before actualisation. But the Merimnaton's superposition is qualitative, not physical, and its collapse is authored by the conscious field, not triggered by physical measurement.

Aristotle and Moral Habituation

Aristotle · Nicomachean Ethics · virtue as second nature

Aristotle held that moral virtue is formed through repeated action: we become just by doing just acts, courageous by doing courageous acts. Character (ethos) is built through habituated response, which over time becomes second nature — the virtuous person does not deliberate whether to act justly; they act justly naturally, because their character has been formed to do so. Freedom and character are not opposed in Aristotle: the virtuous person is more free, not less, because their character is aligned with reason and the good.

Aristotle's account of habituation is the classical precursor of what SUM formalises as

the Solidum Qualitatis: character formed by repeated acts is exactly the topology formed by repeated merimnatic collapse directions. Aristotle was working with the same structural reality but without a formal account of the qualitative field in which the habituation occurs.

SUM response: The $SQ\xi$ is the formal specification of Aristotelian habituation in the Q dimension. Repeated collapses toward Love (P1) build a topology that makes the next collapse toward Love more natural — not because freedom is eliminated but because the character layer has been weighted in that direction. Aristotle's second nature is the $SQ\xi$ formed by repeated P1 collapses. SUM adds three things Aristotle did not have: first, the formal account of the state before the collapse (merimnatic superposition), which is what makes the act genuinely free rather than merely habituated; second, the account of transmitted $SQ\xi$ (intergenerational transmission), which explains why character formation begins before individual choice; third, the identification of the ground state toward which good character tends as Love — which Aristotle named as eudaimonia (flourishing) but did not identify with the ontological ground of the qualitative field.

Where SUM stands in the landscape

The comparative analysis reveals that merimnatic superposition is not a solution to the free will debate from outside. It is a formal specification of what the debate has been circling: the state of the agent before the act, in which both directions are genuinely present and neither is yet actualised.

Hard determinism denies this state exists. Compatibilism acknowledges something like it but does not formally describe it. Libertarian accounts require something like it but cannot explain how it avoids randomness. Sartre asserts it is absolute but gives it no weight. Whitehead comes closest to describing it but does not formalise the co-presence of both directions as a structural feature of the occasion. Quantum accounts gesture at it but locate it in the wrong dimension.

SUM's contribution is precise: the merimnatic superposition is the formal structure of the state before the act. It has qualitative weight (proportionate to GRAVIS). It holds both directions genuinely (not as uncertainty but as co-presence). It collapses through the field's own authorship (not random, not externally triggered). And the direction of the collapse leaves a deposit in the character layer (Solidum Qualitatis) that accumulates into the topology of character and transmits across generations.

Without this structure — without the genuine co-presence of both directions with their full qualitative weight before either is actualised — freedom is either predetermined (determinism) or arbitrary (randomness). With it, freedom is what every tradition that has taken it seriously has sensed it must be: the weight before the act, held in a genuine opening, collapsed by the field's own force, and marked in the structure of who the field becomes.

The state before the act: both directions genuinely present · neither yet

actualised

What makes it free: the field's own authorship of the collapse · not random, not compelled

What makes it weighty: GRAVIS proportionate to what is genuinely at stake

What makes it formative: the direction of the collapse deposits in the SQξ

See also: Merimnaton · Merimnatic Superposition · GRAVIS · GRAVIS Positions P1–4 · Solidum Qualitatis · Intergenerational GRAVIS Transmission · Λω · Q

Sin la superposición merimnáica, la libertad es o predeterminada o arbitraria — y en ninguno de los dos casos deja la dirección del acto una huella cualitativa genuina.

El problema filosófico de la libertad es tan antiguo como el pensamiento sistemático. ¿Puede un ser ser genuinamente libre dentro de un universo causalmente determinado? Si puede, ¿qué tipo de libertad es esa? Si no puede, ¿es la libertad una ilusión? Y si la libertad es real, ¿cómo deja huella un acto libre — cómo se convierte la dirección de una elección en la estructura de un carácter, y no meramente en un evento aleatorio en una secuencia por lo demás determinada?

Cada gran tradición que ha luchado con esta pregunta ha identificado la misma tensión: la libertad genuina parece requerir tanto que el acto sea autorizado — genuinamente propio del agente — como que no esté predeterminado por causas previas. La dificultad es que estos dos requisitos parecen tirar en direcciones opuestas. Un acto autorizado por causas previas está determinado, no es libre. Un acto no causado por estados previos es aleatorio, no autorizado. La historia de la filosofía de la libertad es en gran medida la historia de los intentos de sostener estos dos requisitos juntos sin colapsar hacia el determinismo por un lado o hacia la aleatoriedad por el otro.

La superposición merimnáica del MUS entra en este debate con una propuesta estructural formal en lugar de un argumento metafísico. Lo que sigue es un análisis comparativo: ¿cómo se sitúa la descripción del MUS en relación con las principales posiciones establecidas?

Determinismo Duro

La posición determinista dura sostiene que todo evento, incluida toda elección humana, es el resultado inevitable de causas previas que operan según la ley natural. La libertad de la voluntad es una ilusión producida por la ignorancia de la cadena causal real. Spinoza: la sensación de libertad es simplemente la sensación de no conocer la causa que nos compele. El neurodeterminismo contemporáneo: el cerebro genera la decisión antes de que la consciencia la registre; la sensación de elegir es una narrativa post-hoc construida alrededor de un proceso que ya estaba completo.

Respuesta del MUS: El determinismo duro puede dar cuenta del evento físico pero no de su peso cualitativo. El Merimnátón no es una afirmación sobre la cadena causal física — es una afirmación sobre la estructura de la dimensión Q del evento. Incluso si el resultado físico está determinado en M_4 , el campo cualitativo sostiene ambas direcciones en superposición genuina en Q antes de que el resultado de M_4 se manifieste. Lo que el determinismo duro no puede explicar es por qué la dirección de los actos se acumula en topología de carácter en Q — por qué el mismo estímulo físico produce peso cualitativo estructuralmente diferente en campos con diferente $SQ\xi$. GRAVIS y el $SQ\xi$ no se explican por cadenas causales en M_4 solamente.

Compatibilismo

El compatibilismo sostiene que libertad y determinismo no son mutuamente excluyentes. Un acto libre no es un acto sin causa — es un acto causado por el tipo correcto de causa: por los propios deseos, valores y procesos deliberativos del agente. La versión influyente de Harry Frankfurt: la libertad no se trata de si podrías haber hecho de otra manera en las mismas circunstancias sino de si tu acción fluye de deseos que apruebas en un nivel superior — deseos sobre tus deseos, voliciones de segundo orden.

La jerarquía de deseos de Frankfurt es estructuralmente el relato existente más cercano a la superposición merimnática: la estructura deliberativa es aquella en la que la voluntad actúa sobre sí misma, y la libertad se ubica en la alineación entre deseos de primer y segundo orden.

Respuesta del MUS: El MUS es estructuralmente compatibilista en el sentido de que no requiere que la libertad sea no causada. Lo que el MUS añade a Frankfurt es la estructura formal de la superposición misma: Frankfurt describe la jerarquía de deseos pero no describe formalmente el estado antes del colapso, la co-presencia de ambas direcciones con su peso cualitativo pleno. El Merimnátón nombra lo que Frankfurt señala pero no formaliza: el estado cualitativo específico en el que el acto es genuinamente indeterminado por la jerarquía de deseos precisamente porque la jerarquía misma es lo que se sostiene en superposición. El MUS también añade lo que le falta al relato de Frankfurt: un mecanismo formal por el que la dirección del colapso se acumula en

carácter (Solidum Qualitatis) y se transmite a través de las generaciones.

Libre Albedrío Libertario

Kant · Chisholm · causalidad agencial

El libre albedrío libertario sostiene que la libertad genuina requiere que el agente pudiera haber hecho de otra manera en exactamente las mismas circunstancias: que el acto no está determinado por causas previas sino que es la causa originante de sí mismo. Kant ubicó esta libertad en el reino nouménico, fuera del orden causal del mundo fenoménico: la voluntad racional opera según la ley moral (el imperativo categórico) precisamente porque no está sujeta a la causalidad determinista de la naturaleza.

La dificultad para los relatos libertarios es explicar cómo un acto indeterminado puede ser no obstante autorizado — cómo un acto que no es causado por estados previos del agente puede ser aún genuinamente propio del agente en lugar de aleatorio. Esta es la objeción clásica de la aleatoriedad: el indeterminismo no produce libertad; produce ruido.

Respuesta del MUS: La superposición merimnática resuelve la objeción de la aleatoriedad ubicando la libertad no en la ausencia de causación sino en la co-presencia genuina de ambas direcciones en Q antes de que ninguna sea actualizada. El colapso no es aleatorio — lleva el peso cualitativo pleno de ambas direcciones y la carga GRAVIS específica de lo que está en juego. Tampoco está determinado por causas previas — el SQ ξ pondera el campo en una dirección pero no cierra la superposición. Lo que la colapsa es la propia autoría del campo: el ejercicio específico de libertad en Q que Kant ubicó en el reino nouménico pero no pudo describir formalmente dentro de su marco. El MUS no importa un reino nouménico. Describe en la dimensión Q de M₅ lo que Kant señalaba.

Existencialismo Sartreano

Sartre · libertad radical · mala fe

Sartre sostuvo que la consciencia se define por su libertad radical: la existencia precede a la esencia, lo que significa que el ser humano no tiene naturaleza predeterminada que determine sus actos. Cada momento de consciencia es un acto de autocreación. La mala fe es el intento de negar esta libertad: actuar como si uno estuviera determinado por su naturaleza, rol, situación o pasado, cuando en realidad siempre es libre de elegir de otra manera.

Respuesta del MUS: Sartre identifica correctamente que el yo se constituye por sus elecciones en lugar de simplemente expresar una naturaleza previa — el Solidum Qualitatis es exactamente la estructura que las elecciones construyen. Pero la libertad de

Sartre es formalmente sin peso, y la del MUS no lo es. La superposición merimnática sostiene ambas direcciones con su peso cualitativo pleno: la dirección hacia el Amor no es equivalente a la dirección alejándose de él en términos de lo que le cuesta al campo sostener y lo que produce en la capa de carácter. La mala fe de Sartre — la negación de la libertad — corresponde precisamente a P4 y P2 en el MUS. Pero Sartre no tiene descripción formal de por qué los colapsos repetidos en la dirección de la mala fe se acumulan en una estructura que hace más difícil la siguiente elección — el SQξ es exactamente este relato.

Filosofía del Proceso

Whitehead · avance creativo hacia la novedad

La filosofía del proceso de Alfred North Whitehead sostiene que toda ocasión actual involucra un avance creativo hacia la novedad: la integración del pasado dado con una respuesta creativa libre que determina el carácter específico de la ocasión. La estructura dipolar de cada ocasión — polo físico (recibido de ocasiones previas) y polo mental (respuesta creativa) — anticipa la estructura M_4/Q de M_5 .

Respuesta del MUS: La filosofía del proceso es el relato existente que más se acerca a la estructura del MUS. El avance creativo hacia la novedad es el nombre whiteheadiano de lo que el MUS llama el colapso merimnático: el momento en que el peso recibido (SQξ, carga GRAVIS, topología intergeneracional) se integra con una respuesta libre específica que no estaba determinada por el pasado. Lo que el MUS añade a Whitehead es la especificación formal de la superposición cualitativa antes del colapso: Whitehead describe la síntesis creativa pero no describe formalmente la co-presencia de ambas direcciones como rasgo estructural de la ocasión antes de que ocurra la síntesis.

Aristóteles y la Habitación Moral

Aristóteles · Ética a Nicómaco · la virtud como segunda naturaleza

Aristóteles sostuvo que la virtud moral se forma a través de la acción repetida: nos volvemos justos haciendo actos justos, valientes haciendo actos valientes. El carácter (ethos) se construye a través de la respuesta habituada, que con el tiempo se convierte en segunda naturaleza. La persona virtuosa no delibera si actuar justamente; actúa justamente naturalmente, porque su carácter ha sido formado para ello.

Respuesta del MUS: El SQξ es la especificación formal de la habitación aristotélica en la dimensión Q. Los colapsos repetidos hacia el Amor (P1) construyen una topología que hace más natural el siguiente colapso hacia el Amor — no porque la libertad sea eliminada sino porque la capa de carácter ha sido ponderada en esa dirección. La segunda naturaleza de Aristóteles es el SQξ formado por colapsos P1 repetidos. El MUS añade tres cosas que Aristóteles no tenía: la descripción formal del estado antes del colapso (superposición merimnática), que es lo que hace genuinamente libre el acto en lugar de meramente habitado; el relato del SQξ transmitido (transmisión intergeneracional); y la identificación del estado fundamental hacia el que tiende el buen

carácter como el Amor.

Dónde se sitúa el MUS en el paisaje

El análisis comparativo revela que la superposición merimnática no es una solución al debate del libre albedrío desde fuera. Es una especificación formal de lo que el debate ha estado rodeando: el estado del agente antes del acto, en el que ambas direcciones están genuinamente presentes y ninguna está aún actualizada.

El determinismo duro niega que este estado exista. El compatibilismo reconoce algo parecido pero no lo describe formalmente. Los relatos libertarios lo requieren pero no pueden explicar cómo evita la aleatoriedad. Sartre afirma que es absoluto pero no le da peso. Whitehead se acerca más a describirlo pero no formaliza la co-presencia de ambas direcciones como rasgo estructural de la ocasión. Los relatos cuánticos lo señalan pero lo ubican en la dimensión equivocada.

La contribución del MUS es precisa: la superposición merimnática es la estructura formal del estado antes del acto. Tiene peso cualitativo (proporcional a GRAVIS). Sostiene ambas direcciones genuinamente (no como incertidumbre sino como co-presencia). Colapsa a través de la propia autoría del campo (no aleatoria, no desencadenada externamente). Y la dirección del colapso deja un depósito en la capa de carácter (Solidum Qualitatis) que se acumula en la topología del carácter y se transmite a través de las generaciones.

El estado antes del acto: ambas direcciones genuinamente presentes · ninguna aún actualizada

Lo que lo hace libre: la propia autoría del campo del colapso · no aleatorio, no compelido

Lo que lo hace pesado: GRAVIS proporcional a lo que genuinamente está en juego

Lo que lo hace formativo: la dirección del colapso se deposita en el SQξ

Véase también: Merimnátón · Superposición Merimnática · GRAVIS · Posiciones GRAVIS P1–4 · Solidum Qualitatis · Transmisión Intergeneracional del GRAVIS · $\Lambda\omega$ · Q