

# Information and Mind

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It is tempting to suppose that some concept of *information* could serve eventually to unify mind, matter, and meaning in a single theory. (Dennett and Haugeland, 1987, emphasis in the original)

In this paper I explain my view of the relationships between information, mind, matter and meaning, which I believe is broadly in accordance with Dennett and Haugeland's supposition.

The concept of physical information results from the application of Shannon's (1948) concept of information to physics, and has no semantic aspect or component. It is best considered a reconceptualisation of material form. Its significance is indicated by the general consensus that physical information, like matter and energy, is conserved, due to the lawful nature of physical processes, so that a state of affairs at one time can be deduced given a related state of affairs at another time.

Every physical entity can be considered to encode the outcomes of all of its potential interactions, the decoding key in each case being that with which it interacts. For example, genes are items of physical information encoded in DNA sequences, the decoding key being the biological context. Context both enables and constrains potential interactions.

Brentano (1924) viewed intentionality (a technical term signifying "aboutness" rather than intent) as "the ineliminable mark of the mental." This is due, in my view, to the concept of mind implying modelling, intentionality being the relationship between model and object. I view instrumentalism as entirely valid in this context, and define a model as that which is usefully treated as such. But minds also act to change their environment, to achieve goals – they have purpose. So a mind is a model user.

When an object is visually perceived, intentional information about it is encoded in the light that enters the eye, and in consequent neural activity, where the decoding key is the neural/mental context, the mind/brain as a whole. "Intentional information" is a broad concept encompassing all mental content, meaning and significance. Mental content is encoded in neural activity, while meaning and/or significance can be encountered anywhere, depending upon the decoding key – the mind/brain – concerned.

Intentional information is always encoded in physical information, being decoded in use. Purpose motivates and influences decoding. This might be viewed as a generalisation of Wittgenstein's (1972) later concept of linguistic meaning as use in a given context.

## References

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